DIRECTOR



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NOV 1 2 2013

George W. Heard President, CEO, & Director Global Met Coal Corporation 837 Hastings Street, Suite 204 Vancouver, BC, Canada V6C 3N6

RE: **Draft Permit**

Black Creek Mine

NPDES Permit No. AL0081931

Jefferson County (073)

Dear Mr. Heard:

Transmitted herein is a draft of the above referenced permit. Please review the enclosed draft permit carefully. Please submit any comments on the draft permit to the Department within 30 days from the date of receipt of this letter.

Since the Department has made a tentative decision to issue the above referenced permit, ADEM Admin. Code r. 335-6-6-.21 requires a public notice of the draft permit in a local newspaper followed by a period of at least 30 days for public comment before the permit can be reissued.

The United States Environmental Protection Agency will also receive the draft permit for review during the 30-day public comment period.

Any mining, processing, construction, land disturbance, or other regulated activity proposed to be authorized by this draft permit is prohibited prior to the effective date of the formal permit. Any mining or processing activity within the drainage basin associated with each permitted outfall which is conducted prior to Departmental receipt of certification from a professional engineer licensed to practice in the State of Alabama, that the Pollution Abatement/Prevention Plan was implemented according to the design plan, or notification from the Alabama Surface Mining Commission that the sediment control structures have been certified, is prohibited.

Please be aware that, if you are not already participating in the Department's web-based electronic environmental (E2) reporting system for submittal of discharge monitoring reports (DMRs), your permit will require you to apply for participation in the E2 DMR system within 180 days of the effective date of the permit unless valid justification as to why you cannot participate is submitted in writing. The E2 DMR system allows ADEM to electronically validate, acknowledge receipt, and upload data to the state's central wastewater database. This improves the accuracy of reported compliance data and reduces costs to both the regulated community and ADEM. The Permittee Participation Package may be downloaded online at https://e2.adem.alabama.gov/npdes or you may obtain a hard copy by submitting a written request or by emailing e2admin@adem.alabama.gov.

The Alabama Department of Environmental Management encourages you to voluntarily consider pollution prevention practices and alternatives at your facility. Pollution Prevention may assist you in complying with effluent limitations, and possibly reduce or eliminate monitoring requirements.

Should you have any questions concerning this matter, please contact Whitney Bell by email at wnb@adem.state.al.us or by phone at (334) 271-7795.

Sincerely,

Catherine McNeill, Chief

Mining and Natural Resource Section Stormwater Management Branch

atherine medeill

Water Division

CAM/wnb File: DPER/44548

Enclosure

cc: Whitney Bell, ADEM

Environmental Protection Agency Region IV

Alabama Department of Conservation and Natural Resources

U.S. Fish and Wildlife Service

Alabama Historical Commission

Advisory Council on Historic Preservation

Alabama Surface Mining Commission

Alabama Department of Industrial Relations





NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM INDIVIDUAL PERMIT

PERMITTEE:

Global Met Coal Corporation

837 Hastings Street, Suite 204 Vancouver, BC, Canada V6C3N6

FACILITY LOCATION:

Black Creek Mine

River Road

Mount Olive, AL 35117 Jefferson County (073)

PERMIT NUMBER:

AL0081931

DSN & RECEIVING STREAM

001-1 Crooked Creek 002-1 Crooked Creek 003-1 Crooked Creek 012-1 Locust Fork

In accordance with and subject to the provisions of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251-1378 (the "FWPCA"), the Alabama Water Pollution Control Act, as amended, Code of Alabama 1975, §§ 22-22-1 to 22-22-14 (the "AWPCA"), the Alabama Environmental Management Act, as amended, Code of Alabama 1975, §§22-22A-1 to 22-22A-16, and rules and regulations adopted thereunder, and subject further to the terms and conditions set forth in this permit, the Permittee is hereby authorized to discharge into the above-named receiving waters.

ISSUANCE DATE:	
EFFECTIVE DATE:	
EXPIRATION DATE:	

** DRAFT **

MINING AND NATURAL RESOURCE SECTION NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

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PART I DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS

A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

- 1. Active Mining Limitations and Monitoring Requirements
- a. Outfalls: 001-1 through 003-1

During the period beginning on the effective date of this Permit and lasting through the expiration date of this Permit, the Permittee is authorized to discharge from Outfalls 001-1 through 003-1 identified on Page 1 of this Permit and described more fully in the Permittee's application, if the outfalls have been constructed and certified. Except as provided in Parts I.A.2. and 3., discharges shall be limited and monitored by the Permittee as specified below:

	Dise	charge Limi	Monitoring Requirements		
Parameter	Daily Minimum	Monthly Average	Daily Maximum	Sample Type	Measurement Frequency ¹
Specific Conductance 00095		Report μS/cm	Report μS/cm	Grab	2/Month
Sulfate (As S) 00154		Report mg/L	Report mg/L	Grab	2/Month
pH 00400	6.0 s.u.		9.0 s.u.	Grab	2/Month
pH ² 00400	6.0 s.u.		10.5 s.u.	Grab	2/Month
Solids, Total Suspended 00530		35.0 mg/L	70.0 mg/L	Grab	1/Week
Solids, Total Suspended 00530		Report lbs/day	Report lbs/day	Grab	1/Week
Nitrite Plus Nitrate Total 1 Det. (as N) ³ 00630		Report lbs/day		Grab	1/Month
Selenium, Total Recoverable ⁴ 00981		373.8 μg/L	1126.3 μg/L	Grab	1/Month
Thallium, Total Recoverable ⁴ 00982		20.45 μg/L		Grab	1/Month
Iron, Total (As Fe) ⁴ 01045		3.0 mg/L	6.0 mg/L	Grab	2/Month
Manganese, Total (As Mn) ⁵ 01055		2.0 mg/L	4.0 mg/L	Grab	2/Month
Nickel, Total Recoverable ⁴ 01074		9.8 mg/L	66.4 mg/L	Grab	I/Month
Silver, Total Recoverable ⁴ 01079			181.2 μg/L	Grab	1/Month

See Part I.C.2. for further measurement frequency requirements.

See Part IV.D. for pH Exemption Discharge Limitations.

Monitoring for Total Nitrite Plus Nitrate is not required during the months of November through March.

For the purpose of demonstration of compliance with this parameter, "Total" and "Total Recoverable" shall be considered equivalent.

See Part IV.E. for Manganese Exemption Discharge Limitations.

Zinc, Total Recoverable ⁴		24.6	24.6	0.1	10.4	
01094		mg/L	mg/L	Grab	1/Month	
Cadmium, Total Recoverable ⁴		70.5	434.5	Cook	101 1	
01113		μg/L	μg/L	Grab	1/Month	
Lead, Total Recoverable ⁴		1.1	20.9	Cook	125	
01114		mg/L	mg/L	Grab	1/Month	
Copper, Total Recoverable ⁴		24.52	Report	Grab	1/Month	
01119		μg/L	μg/L	Grab	1/Month	
Antimony, Total Recoverable ⁴		28.0		Grab	1/Month	
01268		mg/L		Giab	1/Month	
Arsenic, Trivalent Dissolved		346.7	Report	Grab	1/Month	
22680		μg/L	μg/L	Grao	17141011411	
Flow, In Conduit or Thru Treatment Plant ⁶		Report	Report	Instantaneous	1/Week	
50050	********	MGD	MGD		17 WCCK	
Toxicity, Ceriodaphnia Acute ⁷			0	Cook	1/Ossantan	
61425			pass(0)/fail(1)	Grab	1/Quarter	
Toxicity, Pimephales Acute ⁷			0	GI	1/0	
61427			pass(0)/fail(1)	Grab	1/Quarter	
Solids, Total Dissolve (TDS)		Report	Report	6.1	1/0	
70296		mg/L	mg/L	Grab	1/Quarter	
Mercury, Total Recoverable ⁴		0.89	135.2	0.1	104 4	
71901		μg/L	μg/L	Grab	1/Month	
Chromium/Chromium VI, Total Recoverable ⁴		822.3	901.1	0.1	1/3.4	
78247		μg/L	μg/L	Grab	1/Month	
Cyanide, Total Recoverable ⁴		388.7	1239.0	Crah	1/Manth	
78248		μg/L	μg/L	Grab	1/Month	

Flow must be determined at the time of sample collection by direct measurement, calculation, or other method acceptable to the Department.
See Part IV.F. for Effluent Toxicity Limitations and Biomonitoring Requirements for Acute Toxicity.

b. Outfall 012-1

During the period beginning on the effective date of this Permit and lasting through the expiration date of this Permit, the Permittee is authorized to discharge from Outfall 012-lidentified on Page 1 of this Permit and described more fully in the Permittee's application, if the outfall has been constructed and certified. Except as provided in Parts I.A.2. and 3., discharges shall be limited and monitored by the Permittee as specified below:

	Disc	charge Limi	tations	Monitoring	Monitoring Requirements	
Parameter	Daily Minimum	Monthly Average	Daily Maximum	Sample Type	Measurement Frequency ⁸	
Specific Conductance		Report	Report		224	
00095		μS/cm	μS/cm	Grab	2/Month	
Sulfate (As S)		Report	Report	6.1	2/Month	
00154		mg/L	mg/L	Grab		
pH	6.0		9.0	G - I	224 4	
00400	s.u.		s.u.	Grab	2/Month	
pH ⁹	6.0		10.5	C1-	201	
00400	s.u.		s.u.	Grab	2/Month	
Solids, Total Suspended		35.0	70.0	Ch	1/Week	
00530		mg/L	mg/L	Grab		
Solids, Total Suspended		Report	Report	Cual	1/33/2010	
00530		lbs/day	lbs/day	Grab	1/Week	
Nitrite Plus Nitrate Total 1 Det. (as N) ¹⁰		Report		Grab	1/Month	
00630		lbs/day				
Selenium, Total Recoverable ¹¹		4.57	13.72	Grab	1/Month	
00981		mg/L	mg/L	Grab	1/Wolldi	
Thallium, Total Recoverable ¹¹		250.1		Grab	1/Month	
00982		μg/L		Grab	1/Month	
Iron, Total (As Fe) ¹¹		3.0	6.0	Grab	2/Month	
01045		mg/L	mg/L	Grao	2/Monui	
Manganese, Total (As Mn) ¹²		2.0	4.0	Grab	2/Month	
01055		mg/L	mg/L	Grau	2/Wionth	
Nickel, Total Recoverable ¹¹		120.0	808.9	Grab	1/Month	
01074		mg/L	mg/L	Grao	171011011	
Silver, Total Recoverable ¹¹			2.21	Grab	1/Month	
01079			mg/L	Giuo	1/1VIOIIII	
Zinc, Total Recoverable ¹¹		300.0	300.0	Grab	I/Month	
01094		mg/L	mg/L	J. 100		
Cadmium, Total Recoverable ¹¹		861.6	5291.4	Grab	1/Month	
01113		μg/L	μg/L	0.00	I I I I I I I I I I I I I I I I I I I	

⁸ See Part I.C.2. for further measurement frequency requirements.

See Part IV.D. for pH Exemption Discharge Limitations.

Monitoring for Total Nitrite Plus Nitrate is not required during the months of November through March.

For the purpose of demonstration of compliance with this parameter, "Total" and "Total Recoverable" shall be considered equivalent.

See Part IV.E. for Manganese Exemption Discharge Limitations.

Lead, Total Recoverable ¹¹		13.2	254.5		101 1
01114		mg/L	mg/L	Grab	1/Month
Copper, Total Recoverable ¹¹		300.0	Report	Grab	1/Month
01119		μg/L	μg/L	Grao	1/Wollin
Antimony, Total Recoverable ¹¹		341.0		Grab	1/Month
01268		mg/L		Glab	171011111
Arsenic, Trivalent Dissolved		15.3	Report	Grab	1/Month
22680		mg/L	μg/L	Grab	17 WIOIIII
Flow, In Conduit or Thru Treatment Plant ¹³		Report	Report	Instantaneous	1/Week
50050		MGD	MGD		17 VV CCK
Toxicity, Ceriodaphnia Acute ¹⁴			0	Grab	1/Quarter
61425	200222		pass(0)/fail(1)		1/Quarter
Toxicity, Pimephales Acute ¹⁴			0	Grab	1/Quarter
61427			pass(0)/fail(1)		1/Quarter
Solids, Total Dissolve (TDS)		Report	Report	Grab	1/Quarter
70296		mg/L	mg/L	Giao	1/Quarter
Mercury, Total Recoverable ¹¹		11.0	1646.0	Grab	1/Month
71901		μg/L	μg/L	Giao	1/WOILII
Chromium/Chromium VI, Total Recoverable ¹¹		10.0	11.0	Grab	1/Month
78247		mg/L	mg/L	Giau	1/WOILLI
Cyanide, Total Recoverable ¹¹		4.75	15.1	Grab	1/Month
78248		mg/L	mg/L	Grao	1/WOILLI

Flow must be determined at the time of sample collection by direct measurement, calculation, or other method acceptable to the Department.
 See Part IV.F. for Effluent Toxicity Limitations and Biomonitoring Requirements for Acute Toxicity.

2. Precipitation Exemption Limitations and Monitoring Requirements¹⁵

During the period beginning on the effective date of this Permit and lasting through the expiration date of this Permit, the Permittee is authorized to discharge from each outfall identified on Page 1 of this Permit and described more fully in the Permittee's application, if the outfalls have been constructed and certified. During periods of applicable 24-hour precipitation events for which the Permittee claims an exemption of standard mining limits as provided by Part IV.B., such discharge shall be limited and monitored by the Permittee as specified below:

	Disch	arge Limit	ations	Monitoring Requirements		
Parameter	Daily	Monthly	Daily	Sample	Measurement	
	Minimum	Average	Maximum	Type	Frequency16	
Specific Conductance		Report	Report	Grab	1/Month	
00095		μS/cm	μS/cm	Grau	1/Month	
Sulfate (As S)		Report	Report	Grab	1/Month	
00154		mg/L	mg/L	Grab		
pH	6.0		9.0	Grab	1/Month	
00400	s.u.		s.u.	Grab	1/Month	
Solids, Total Suspended		Report	Report	Grab	1/West	
00530		lbs/day	lbs/day	Grab	1/Week	
Solids, Settleable			0.5	Grab	1/Month	
00545			mL/L	Grau	1/World	
Nitrite Plus Nitrate Total 1 Det. (as N) ¹⁷		Report		Grab	1/Month	
00630		lbs/day		Grao	1/World1	
Selenium, Total Recoverable ¹⁸		Report	Report	Grab	1/Month	
00981		μg/L	μg/L		1/WOHUI	
Thallium, Total Recoverable ¹⁸		Report		Grab	1/Month	
00982		mg/L				
Nickel, Total Recoverable ¹⁸		Report	Report	Grab	1/Month	
01074		μg/L	μg/L	Grab	1714701111	
Silver, Total Recoverable ¹⁸			Report	Grab	1/Month	
01079			μg/L	Giuo	17171011111	
Zinc, Total Recoverable ¹⁸		Report	Report	Grab	1/Month	
01094		μg/L	μg/L			
Cadmium, Total Recoverable 18		Report	Report	Grab	1/Month	
01113		μg/L	μg/L			
Lead, Total Recoverable 18		Report	Report	Grab	1/Month	
Ol1114		μg/L	μg/L			
Chromium/Chromium III, Total Recoverable 18 01118		Report	Report	Grab	1/Month	
Copper, Total Recoverable 18		μg/L	μg/L			
01119		Report	Report	Grab	1/Month	
01119	<u> </u>	μg/L	μg/L			

See Part IV.B. for Precipitation Event Discharge Limitations.

¹⁶ See Part I.C.2. for further measurement frequency requirements.

Monitoring for Total Nitrite Plus Nitrate is not required during the months of November through March.

For the purpose of demonstration of compliance with this parameter, "Total" and "Total Recoverable" shall be considered equivalent.

Antimony, Total Recoverable ¹⁸ 01268	 Report μg/L		Grab	1/Month
Arsenic, Trivalent Dissolved 22680	 Report µg/L	Report μg/L	Grab	1/Month
Flow, In Conduit or Thru Treatment Plant ¹⁹ 50050	 Report MGD	Report MGD	Instantaneous	1/Week
Solids, Total Dissolved (TDS) 70296	 Report mg/L	Report mg/L	Grab	1/Quarter
Mercury, Total Recoverable ¹⁸ 71901	 Report µg/L	Report μg/L	Grab	1/Month
Chromium/Chromium VI, Total Recoverable 78247	 Report µg/L	Report μg/L	Grab	1/Month
Cyanide, Total Recoverable ¹⁸ 78248	 Report μg/L	Report μg/L	Grab	1/Month

Flow must be determined at the time of sample collection by direct measurement, calculation, or other method acceptable to the Department.

3. Post Mining Limitations and Monitoring Requirements²⁰ a. Outfalls 001-1 through 003-1

During the period beginning on the effective date of this Permit and lasting through the expiration date of this Permit, the Permittee is authorized to discharge from Outfalls 001-1 through 003-1 identified on Page 1 of this Permit and described more fully in the Permittee's application, if the outfalls have been constructed and certified. For those outfalls which the Department has granted written approval pursuant to Part IV.C., such discharge shall be limited and monitored by the Permittee as specified below:

	Dise	charge Limi	Monitoring Requirements		
Parameter	Daily	Monthly	Daily	Sample	Measurement
	Minimum	Average	Maximum	Type	Frequency ²¹
Specific Conductance		Report	Report	Cuah	1/Month
00095		μS/cm	μS/cm	Grab	1/Ivionth
Sulfate (As S)		Report	Report	Ct-	104 4
00154		mg/L	mg/L	Grab	1/Month
рН	6.0		9.0	Grab	1/Month
00400	s.u.		s.u.	Grab	1/Month
pH ²²	6.0		10.5	Grab	1/Month
00400	s.u.		s.u.	Grab	1/Month
Solids, Total Suspended		35.0	70.0	Grab	1/Week
00530		mg/L	mg/L	Grab	1/ W CCK
Solids, Total Suspended		Report	Report	Comb	1/Week
00530		lbs/day	lbs/day	Grab	
Nitrite Plus Nitrate Total 1 Det. (as N) ²³		Report		Grab	1/Month
00630		lbs/day			
Selenium, Total Recoverable ²⁴		373.8	1126.3	Grab	1/Month
00981		μg/L	μg/L	Grao	171011111
Thallium, Total Recoverable ²⁴		20.45		Grab	1/Month
00982		μg/L		Grao	1/10/10/10/1
Iron, Total (As Fe)		3.0	6.0	Grab	1/Month
01045		mg/L	mg/L	Grab	1/1011111
Manganese, Total (As Mn) ²⁵		2.0	4.0	Grab	1/Month
01055		mg/L	mg/L	Grao	1/1/1011011
Nickel, Total Recoverable ²⁴		9.8	66.4	Grab	1/Month
01074		mg/L	mg/L	Grao	T/TVTOTICT
Silver, Total Recoverable ²⁴			181.2	Grab	1/Month
01079			μg/L	0140	T/IVIOIIII
Zinc, Total Recoverable ²⁴		24.6	24.6	Grab	1/Month
01094		mg/L	mg/L	Grao	1/1VIOITUI
Cadmium, Total Recoverable ²⁴		70.5	434.5	Grab	1/Month
01113		μg/L	μg/L	Grao	TAMORUI

²⁰ See Part IV.C. for Post-Mining Discharge Limitations.

See Part I.C.2. for further measurement frequency requirements.

²² See Part IV.D. for pH Exemption Discharge Limitations.

Monitoring for Total Nitrite Plus Nitrate is not required during the months of November through March.

For the purpose of demonstration of compliance with this parameter, "Total" and "Total Recoverable" shall be considered

See Part IV.E. for Manganese Exemption Discharge Limitations.

Lead, Total Recoverable ²⁴	1.1	20.9	Cont	1/1/1
01114	 mg/L	mg/L	Grab	1/Month
Copper, Total Recoverable ²⁴	24.52	Report	Grab	1/Month
01119	 μg/L	μg/L	Giao	1/Month
Antimony, Total Recoverable ²⁴	28.0		Grab	1/Month
01268	 mg/L		Giao	1/WOHUI
Arsenic, Trivalent Dissolved	 346.7	Report	Grab	1/Month
22680	 μg/L	μg/L	Giao	1/Monus
Flow, In Conduit or Thru Treatment Plant ²⁶	 Report	Report	Instantaneous	1/Week
50050	 MGD	MGD		
Toxicity, Ceriodaphnia Acute ²⁷		0	Grab	1/Quarter
61425	 	pass(0)/fail(1)	Grao	1/Quarter
Toxicity, Pimephales Acute ²⁷		0	Cush	1/0
61427	 	pass(0)/fail(1)	Grab	1/Quarter
Solids, Total Dissolve (TDS)	Report	Report	Cuelle	1/0
70296	 mg/L	mg/L	Grab	1/Quarter
Mercury, Total Recoverable ²⁴	0.89	135.2	Grab	1/Month
71901	 μg/L	μg/L	Grab	1/Month
Chromium/Chromium VI, Total Recoverable ²⁴	822.3	901.1	Grab	1/Month
78247	 μg/L	μg/L	Grab	1/WONED
Cyanide, Total Recoverable ²⁴	388.7	1239.0	Grab	1/Month
78248	 μg/L	μg/L	Grau	1/Month

Flow must be determined at the time of sample collection by direct measurement, calculation, or other method acceptable to the Department.
 See Part IV.F. for Effluent Toxicity Limitations and Biomonitoring Requirements for Acute Toxicity.

b. Outfall 012-1

During the period beginning on the effective date of this Permit and lasting through the expiration date of this Permit, the Permittee is authorized to discharge from Outfall 012-1 identified on Page 1 of this Permit and described more fully in the Permittee's application, if the outfall has been constructed and certified. For those outfalls which the Department has granted written approval pursuant to Part IV.C., such discharge shall be limited and monitored by the Permittee as specified below:

	Dise	charge Limi	Monitoring Requirements		
Parameter	Daily	Monthly	Daily	Sample	Measurement
	Minimum	Average	Maximum	Туре	Frequency ²⁸
Specific Conductance		Report	Report	Crah	1/Month
00095		μS/cm	μS/cm	Grab	1/Month
Sulfate (As S)		Report	Report	Grab	1/Month
00154		mg/L	mg/L	Grab	
рН	6.0		9.0	Cook	1/N Comth
00400	s.u.		s.u.	Grab	1/Month
pH ²⁹	6.0		10.5	Cuel	1/Adamsh
00400	s.u.		s.u.	Grab	1/Month
Solids, Total Suspended		35.0	70.0	Grab	1/Week
00530		mg/L	mg/L	Grab	
Solids, Total Suspended		Report	Report	Cuel	1/Week
00530		lbs/day	lbs/day	Grab	
Nitrite Plus Nitrate Total 1 Det. (as N) ³⁰		Report		Grab	1/Month
00630		lbs/day			
Selenium, Total Recoverable ³¹		4.57	13.72	Grab	1/Month
00981		mg/L	mg/L	Grab	1/14/0/(01)
Thallium, Total Recoverable ³¹		250.1		Grab	1/Month
00982		μg/L		Grab	1/14/01(11)
Iron, Total (As Fe) ²⁶		3.0	6.0	Grab	1/Month
01045		mg/L	mg/L	Grao	17141011111
Manganese, Total (As Mn) ³²		2.0	4.0	Grab	1/Month
01055		mg/L	mg/L	Grab	17141011111
Nickel, Total Recoverable ³¹		120.0	808.9	Grab	1/Month
01074		mg/L	mg/L	Grab	17 WORGI
Silver, Total Recoverable ³¹			2.21	Grab	1/Month
01079			mg/L	Grab	1/10101111
Zinc, Total Recoverable ³¹		300.0	300.0	Grab	1/Month
01094		μg/L	μg/L	0.00	
Cadmium, Total Recoverable ³¹		861.6	5291.4	Grab	1/Month
01113		μg/L	μg/L	5740	.,

²⁸ See Part I.C.2. for further measurement frequency requirements.

²⁹ See Part IV.D. for pH Exemption Discharge Limitations.

Monitoring for Total Nitrite Plus Nitrate is not required during the months of November through March.

For the purpose of demonstration of compliance with this parameter, "Total" and "Total Recoverable" shall be considered equivalent

³² See Part IV.E. for Manganese Exemption Discharge Limitations.

Lead, Total Recoverable ³¹		13.2	254.5	Grab	1/Month
01114	*	mg/L	mg/L	Grao	
Copper, Total Recoverable ³¹		300.0	Report	Grab	1/Month
01119		μg/L	μg/L	Grab	
Antimony, Total Recoverable ³¹		341.0		Grab	1/Month
01268		mg/L			
Arsenic, Trivalent Dissolved	15.3 Report		Grab	1/Month	
22680		mg/L	μg/L	Grab	17 MOILLI
Flow, In Conduit or Thru Treatment Plant ³³		Report	Report	Instantaneous	1/Week
50050		MGD	MGD	mstantaneous	
Toxicity, Ceriodaphnia Acute ³⁴			0	Grab	1/Quarter
61425			pass(0)/fail(1)	Grau	
Toxicity, Pimephales Acute ³⁴			0	Grab	1/Quarter
61427	p		pass(0)/fail(1)	Grao	1/Quarter
Solids, Total Dissolve (TDS)		Report	Report	Grab	1/Quarter
70296		mg/L	mg/L	Grab	
Mercury, Total Recoverable ³¹	11.0 1646.0		Grab	1/Month	
71901		μg/L	μg/L	Grab	1/IVIOIIII
Chromium/Chromium VI, Total Recoverable ³¹		10.0	11.0	Grab	1/Month
78247		mg/L	mg/L	Grau	
Cyanide, Total Recoverable ³¹		4.75	15.1	Grab	1/Month
78248	*****	mg/L	mg/L	Grau	

4. Total Year-to-Date Limitation

a. During the period beginning on the effective date of this Permit and lasting through the expiration date of this Permit, the Permittee is authorized to discharge from all outfalls, which are described more fully in the Permittee's application. In addition to the limitations and monitoring requirements presented in Parts I.A.1. through 3. of this Permit, such discharges shall be limited and monitored by the Permittee as specified below:

Parameter	Discharge Limitation	Monitoring Requirements		
	Total Year-to-Date	Sample Type	Measurement Frequency	
Solids, Total Suspended 00530	3.14 tons/year	Calculated	1/Week	

b. The total year-to-date limitation for Total Suspended Solids addressed by Part I.A.4.a. is the sum of the daily discharge mass flow rates of Total Suspended Solids calculated for all preceding days within a calendar year at all relevant outfalls combined. For days when data has not been collected, the mass flow rates for those days shall be assumed to be equal to the most recently calculated daily mass flow rate.

Flow must be determined at the time of sample collection by direct measurement, calculation, or other method acceptable to the Department.

³⁴ See Part IV.F. for Effluent Toxicity Limitations and Biomonitoring Requirements for Acute Toxicity.

B. REQUIREMENTS TO ACTIVATE A PROPOSED MINING OUTFALL

- Discharge from any point source identified on Page 1 of this Permit which is a proposed outfall is not authorized by this Permit until the outfall has been constructed and certification received by the Department from a professional engineer, registered in the State of Alabama, certifying that such facility has been constructed in accordance with plans and specifications approved by the ASMC, if applicable. This requirement shall not apply to pumped discharges from the underground works of underground coal mines where no surface structure is required by the ASMC, provided the Department is notified in writing of the completion or installation of such facilities, and the pumped discharges will meet permit effluent limits without treatment.
- 2. Certification required by Part I.B.1. shall be submitted on a completed ADEM Form 432. The certification shall include the latitude and longitude of the constructed and certified outfall.
- Discharge monitoring and Discharge Monitoring Report (DMR) reporting requirements described in Part I.C. of this Permit do not apply to point sources that have not been constructed and certified.
- 4. Upon submittal of the certification required by Part I.B.1. to the Department, all monitoring and DMR submittal requirements shall apply to the constructed and certified outfall.

C. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS

1. Sampling Schedule and Frequency

- c. Except as provided in Parts IV.B. and C., the Permittee shall collect samples of the discharge from each constructed and certified point source identified on Page 1 of this Permit and described more fully in the Permittee's application, at the frequency specified in Part I.A. Analysis of the samples shall be conducted for the parameters specified in Part I.A.
- d. For each permitted, constructed, and certified point source which results from direct pumped drainage from the underground works of an underground coal mine or from surface drainage, if the final effluent is pumped in order to discharge (e.g. incised ponds, old highwall cuts, old pit areas or depressions), at least one grab sample from the permitted point source shall be obtained and analyzed each quarterly (three month) monitoring period if a discharge occurs at any time during the quarterly monitoring period.
- e. The Permittee may increase the frequency of sampling listed in Parts I.C.1.a and I.C.1.b; however, all sampling results must be reported to the Department and included in any calculated results submitted to the Department in accordance with this Permit.

2. Measurement Frequency

Measurement frequency requirements found in Part I.A. shall mean:

- A measurement frequency of one day per week shall mean sample collection on any day of discharge which occurs every calendar week.
- b. A measurement frequency of two days per month shall mean sample collection on any day of discharge which occurs every other week, but need not exceed two sample days per month.

- c. A measurement frequency of one day per month shall mean sample collection on any day of discharge which occurs during each calendar month.
- d. A measurement frequency of one day per quarter shall mean sample collection on any day of discharge which occurs during each calendar quarter.
- e. A measurement frequency of one day per six months shall mean sample collection on any day of discharge which occurs during the period of January through June and during the period of July through December.
- f. A measurement frequency of one day per year shall mean sample collection on any day of discharge which occurs during each calendar year.

3. Monitoring Schedule

The Permittee shall conduct the monitoring required by Part I.A. in accordance with the following schedule:

- a. MONITORING REQUIRED MORE FREQUENTLY THAN MONTHLY AND MONTHLY shall be conducted during the first full month following the effective date of coverage under this Permit and every month thereafter. More frequently than monthly and monthly monitoring may be done anytime during the month, unless restricted elsewhere in this Permit, but the results should be reported on the last Discharge Monitoring Report (DMR) due for the quarter (i.e., with the March, June, September, and December DMRs).
- b. QUARTERLY MONITORING shall be conducted at least once during each calendar quarter. Calendar quarters are the periods of January through March, April through June, July through September, and October through December. The Permittee shall conduct the quarterly monitoring during the first complete calendar quarter following the effective date of this Permit and is then required to monitor once during each quarter thereafter. Quarterly monitoring may be done anytime during the quarter, unless restricted elsewhere in this Permit, but the results should be reported on the last DMR due for the quarter (i.e., with the March, June, September, and December DMRs).
- c. SEMIANNUAL MONITORING shall be conducted at least once during the period of January through June and at least once during the period of July through December. The Permittee shall conduct the semiannual monitoring during the first complete semiannual calendar period following the effective date of this Permit and is then required to monitor once during each semiannual period thereafter. Semiannual monitoring may be done anytime during the semiannual period, unless restricted elsewhere in this Permit, but it should be reported on the last DMR due for the month of the semiannual period (i.e., with the June and December DMRs).
- d. ANNUAL MONITORING shall be conducted at least once during the period of January through December. The Permittee shall conduct the annual monitoring during the first complete calendar annual period following the effective date of this Permit and is then required to monitor once during each annual period thereafter. Annual monitoring may be done anytime during the year, unless restricted elsewhere in this Permit, but it should be reported on the December DMR.

4. Sampling Location

Unless restricted elsewhere in this Permit, samples collected to comply with the monitoring requirements specified in Part I.A. shall be collected at the nearest accessible location just prior to

discharge and after final treatment, or at an alternate location approved in writing by the Department.

5. Representative Sampling

Sample collection and measurement actions taken as required herein shall be representative of the volume and nature of the monitored discharge and shall be in accordance with the provisions of this Permit.

6. Test Procedures

For the purpose of reporting and compliance, Permittees shall use one of the following procedures:

- a. For parameters with an EPA established Minimum Level (ML), report the measured value if the analytical result is at or above the ML and report "0" for values below the ML. Test procedures for the analysis of pollutants shall conform to 40 CFR Part 136, guidelines published pursuant to Section 304(h) of the FWPCA, 33 U.S.C. Section 1314(h), and ADEM Standard Operating Procedures. If more than one method for analysis of a substance is approved for use, a method having a minimum level lower than the permit limit shall be used. If the minimum level of all methods is higher than the permit limit, the method having the lowest minimum level shall be used and a report of less than the minimum level shall be reported as zero and will constitute compliance, however should EPA approve a method with a lower minimum level during the term of this Permit the Permittee shall use the newly approved method.
- b. For pollutant parameters without an established ML, an interim ML may be utilized. The interim ML shall be calculated as 3.18 times the Method Detection Level (MDL) calculated pursuant to 40 CFR Part 136, Appendix B.

Permittees may develop an effluent matrix-specific ML, where an effluent matrix prevents attainment of the established ML. However, a matrix specific ML shall be based upon proper laboratory method and technique. Matrix-specific MLs must be approved by the Department, and may be developed by the Permittee during permit issuance, reissuance, modification, or during compliance schedule.

In either case the measured value should be reported if the analytical result is at or above the ML and "0" reported for values below the ML.

c. For parameters without an EPA established ML, interim ML, or matrix-specific ML, a report of less than the detection limit shall constitute compliance if the detection limit of all analytical methods is higher than the Permit limit using the most sensitive EPA approved method. For the purpose of calculating a monthly average, "0" shall be used for values reported less than the detection limit.

The Minimum Level utilized for procedures identified in Parts I.C.6.a. and b. shall be reported on the Permittee's DMR. When an EPA approved test procedure for analysis of a pollutant does not exist, the Director shall approve the procedure to be used.

7. Recording of Results

For each measurement or sample taken pursuant to the requirements of this Permit, the Permittee shall record the following information:

a. The facility name and location, point source number, date, time, and exact place of sampling or measurements;

- b. The name(s) of person(s) who obtained the samples or measurements;
- The dates and times the analyses were performed;
- d. The name(s) of the person(s) who performed the analyses:
- e. The analytical techniques or methods used including source of method and method number; and
- f. The results of all required analyses.

8. Routine Inspection by Permittee

- a. The Permittee shall inspect all point sources identified on Page 1 of this Permit and described more fully in the Permittee's application and all treatment or control facilities or systems used by the Permittee to achieve compliance with the terms and conditions of this Permit at least as often as the applicable sampling frequency specified in Part I.C.1 of this Permit.
- b. If required by the Director, the Permittee shall maintain a written log for each point source identified on Page 1 of this Permit and described more fully in the Permittee's application in which the Permittee shall record the following information:
 - (1) The date and time the point source and any associated treatment or control facilities or systems were inspected by the Permittee;
 - (2) Whether there was a discharge from the point source at the time of inspection by the Permittee;
 - (3) Whether a sample of the discharge from the point source was collected at the time of inspection by the Permittee;
 - (4) Whether all associated treatment or control facilities or systems appeared to be in good working order and operating as efficiently as possible, and if not, a description of the problems or deficiencies; and
 - (5) The name and signature of the person performing the inspection of the point source and associated treatment or control facilities or systems.

9. Records Retention and Production

- a. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Permit, and records of all data used to complete the above reports or the application for this Permit, for a period of at least three (3) years from the date of the sample collection, measurement, report, or application. This period may be extended by request of the Director at any time. If litigation or other enforcement action, under the AWPCA, AEMA, and/or the FWPCA, is ongoing which involves any of the above records, the records shall be kept until the litigation is resolved. Upon the written request of the Director, the Permittee shall provide the Director with a copy of any record required to be retained by this paragraph. Copies of these records should not be submitted unless requested.
- b. All records required to be kept for a period of three (3) years shall be kept at the permitted facility or an alternate location approved by the Department in writing and shall be available for inspection.

10. Monitoring Equipment and Instrumentation

All equipment and instrumentation used to determine compliance with the requirements of this Permit shall be installed, maintained, and calibrated in accordance with the manufacturer's instructions or, in the absence of manufacturer's instructions, in accordance with accepted practices. The Permittee shall develop and maintain quality assurance procedures to ensure proper operation and maintenance of all equipment and instrumentation. The quality assurance procedures shall include the proper use, maintenance, and installation, when appropriate, of monitoring equipment at the plant site.

D. DISCHARGE REPORTING REQUIREMENTS

1. Requirements for Reporting of Monitoring

- The Department is utilizing a web-based electronic environmental (E2) reporting system a. for submittal of DMRs. The E2 DMR system allows ADEM to electronically validate, acknowledge receipt, and upload data to the state's central wastewater database. This improves the accuracy of reported compliance data and reduces costs to both the regulated community and ADEM. If the Permittee is not already participating in the E2 DMR system, the Permittee must apply for participation in the E2 DMR system within 180 days of the effective date of this permit unless valid justification as to why they cannot participate is submitted in writing. After 180 days, hard copy DMRs may be used only with written approval from the Department. To participate in the E2 DMR system, the Permittee Participation Package may be downloaded online at https://e2.adem.alabama.gov/npdes. If the electronic environmental (E2) reporting system is down (i.e. electronic submittal of DMR data is unable to be completed due to technical problems originating with the Department's system; this could include entry/submittal issues with an entire set of DMRs or individual parameters), permittees are not relieved of their obligation to submit DMR data to the Department by the required submittal date. However, if the E2 system is down on the 28th day of the month or is down for an extended period of time as determined by the Department when a DMR is required to be submitted, the facility may submit the data in an alternate manner and format acceptable to the Department. Preapproved alternate acceptable methods include faxing, e-mailing, mailing, or hand-delivery of data such that they are received by the required reporting date. Within five calendar days of the E2 system resuming operation, the Permittee shall enter the data into the E2 reporting system unless an alternate timeframe is approved by the Department. An attachment should be included with the E2 DMR submittal verifying the original submittal date (date of the fax, copy of dated email, or hand-delivery stamped date). If a permittee is allowed to submit via the US Postal Service, the DMR must be legible and bear an original signature. Photo and electronic copies of the signature are not acceptable and shall not satisfy the reporting requirements of this Permit. If the Permittee, using approved analytical methods as specified in Part I.C.6, monitors any discharge from a point source identified on Page 1 of this Permit and describe more fully in the Permittee's application more frequently than required by this Permit; the results of such monitoring shall be included in the calculation and reporting of values on the DMR Form, and the increased frequency shall be indicated on the DMR Form. In the event no discharge from a point source identified on Page 1 of this Permit and described more fully in the Permittee's application occurs during a monitoring period, the Permittee shall report "No Discharge" for such period on the appropriate DMR Form.
- b. The Permittee shall report "No Discharge During Quarterly Monitoring Period" on the appropriate DMR Form for each point source receiving pumped discharges pursuant to

Part I.C.1.b. provided that no discharge has occurred at <u>any</u> time during the entire quarterly (three month) monitoring period.

- c. Each DMR Form submitted by the Permittee to the Department in accordance with Part I.D.1.a. must be legible and bear an original signature or electronic signature. Photo and electronic copies of the signature are not acceptable and shall not satisfy the reporting requirements of this Permit.
- d. All reports and forms required to be submitted by this Permit, the AWPCA, and the Department's rules and regulations, shall be signed by a "responsible official" of the Permittee as defined in ADEM Admin. Code r. 335-6-6-.09 or a "duly authorized representative" of such official as defined in ADEM Admin. Code r. 335-6-6-.09 and shall bear the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

e. All DMRs, reports and forms required to be submitted by this Permit, the AWPCA and the Department's rules and regulations, shall be addressed to:

Alabama Department of Environmental Management Water Division, Mining and Natural Resource Section Post Office Box 301463 Montgomery, Alabama 36130-1463

Certified and Registered Mail shall be addressed to:

Alabama Department of Environmental Management Water Division, Mining and Natural Resource Section 1400 Coliseum Boulevard Montgomery, Alabama 36110-2059

- f. Unless authorized in writing by the Department, approved reporting forms required by this Permit or the Department are not to be altered, and if copied or reproduced, must be consistent in format and identical in content to the ADEM approved form. Unauthorized alteration, falsification, or use of incorrectly reproduced forms constitutes noncompliance with the requirements of this Permit and may significantly delay processing of any request, result in denial of the request, result in permit termination, revocation, suspension, modification, or denial of a permit renewal application, or result in other enforcement action.
- g. If this Permit is a reissuance, then the Permittee shall continue to submit DMRs in accordance with the requirements of their previous permit until such time as DMRs are due as discussed in Part I.D.1.a.

2. Requirements for Outfall Certification Summary Submittal

The Permittee shall submit a summary of outfalls identified on Page 1 of this Permit so that it is received by the Director with the required DMRs no later than the 28th day of the month following

the quarterly reporting period (i.e., on the 28th day of January, April, July, and October of each year). This Outfall Certification Summary shall indicate whether each outfall identified on Page 1 of this Permit has been certified and, if so, it shall include the date for each certification as well as the latitude and longitude of the certified outfall. If any outfall identified on Page 1 of this Permit has received written approval from the Department pursuant to Part IV.C. of this Permit stating that the Permittee may utilize the Post-Mining Discharge Limitations specified in Part I.A.3., then the list of outfalls shall include the date of the Post-Mining Discharge Limitations approval. If any outfall identified on Page 1 of this Permit has been released from monitoring requirements as provided in Part I.D.4. of this Permit, then the list of outfalls shall include the date of the monitoring requirement release. The Outfall Certification Summary shall be submitted in a format approved or developed by the Department. This submittal is only required when DMR submittal is required by Part I.B.4.

3. Noncompliance Notification

- a. The Permittee must notify the Department if, for any reason, the Permittee's discharge:
 - (1) Potentially threatens human health or welfare;
 - (2) Potentially threatens fish or aquatic life;
 - (3) Causes an in-stream water quality criterion to be exceeded;
 - (4) Does not comply with an applicable toxic pollutant effluent standard or prohibition established under Section 307(a) of the FWPCA, 33 U.S.C. §1317(a);
 - (5) Contains a quantity of a hazardous substance which has been determined may be harmful to the public health or welfare under Section 311(b)(4) of the FWPCA, 33 U.S.C. §1321(b)(4); or
 - (6) Exceeds any discharge limitation for an effluent parameter as a result of an unanticipated bypass or upset.

The Permittee shall orally or electronically report any of the above occurrences, describing the circumstances and potential effects of such discharge to the Director within 24-hours after the Permittee becomes aware of the occurrence of such discharge. In addition to the oral or electronic report, the Permittee shall submit to the Director a written report as provided in Part I.D.3.c., no later than five (5) days after becoming aware of the occurrence of such discharge.

- b. If for any reason, the Permittee's discharge does not comply with any limitation of this Permit, the Permittee shall submit a written report to the Director, as provided in Part I.D.3.c. This report must be submitted with the next Discharge Monitoring Report required to be submitted by Part I.D.1. of this Permit after becoming aware of the occurrence of such noncompliance.
- c. Form 401 or Form 421 must be submitted to the Director in accordance with Parts I.D.3.a. and b. The completed form must document the following information:
 - (1) A description of the discharge and cause of noncompliance;
 - (2) The period of noncompliance, including exact dates, times, and duration of the noncompliance. If not corrected by the due date of the written report, then the Permittee is to state the anticipated timeframe that is expected to transpire before the noncompliance is resolved; and

(3) A description of the steps taken and/or being taken to reduce or eliminate the noncomplying discharge and to prevent its recurrence.

4. Reduction, Suspension, or Termination of Monitoring and/or Reporting Requirements

- a. The Director may, with respect to any point source identified on Page 1 of this Permit and described more fully in the Permittee's application, authorize the Permittee to reduce, suspend, or terminate the monitoring and/or reporting required by this Permit upon the submission of a written request for such reduction, suspension, or termination by the Permittee provided:
 - All mining, processing, or disturbance in the drainage basin(s) associated with the discharge has ceased and site access is adequately restricted or controlled to preclude unpermitted and unauthorized mining, processing, transportation, or associated operations/activity;
 - (2) Unless waived in writing by the Department, the Permittee has been granted, in writing, a 100% Bond Release, by the Alabama Surface Mining Commission for all areas mined or disturbed in the drainage basin(s) associated with the discharge;
 - (3) The Permittee has certified to the Director that the 100% Bond Release has been granted by the Alabama Surface Mining Commission for all areas disturbed in the drainage basin(s) associated with the discharge;
 - (4) All surface effects of the mining activity such as fuel or chemical tanks, preparation plants or equipment, old tools or equipment, junk or debris, etc., must be removed and disposed of according to applicable state and federal regulations;
 - (5) The Permittee's request for termination of monitoring and reporting requirements contained in this Permit has been supported by monitoring data covering a period of at least six consecutive months or such longer period as is necessary to assure that the data reflect discharges occurring during varying seasonal climatological conditions;
 - (6) The Permittee has stated in its request that the samples collected and reported in the monitoring data submitted in support of the Permittee's request for monitoring termination or suspension are representative of the discharge and were collected in accordance with all Permit terms and conditions respecting sampling times (e.g., rainfall events) and methods and were analyzed in accordance with all Permit terms and conditions respecting analytical methods and procedures;
 - (7) The Permittee has certified that during the entire period covered by the monitoring data submitted, no chemical treatment of the discharge was provided;
 - (8) The Permittee's request has included the certification required by Part I.D.1.d. of this Permit; and
 - (9) The Permittee has certified to the Director in writing as part of the request, its compliance with (1) through (8) above.

b. It remains the responsibility of the Permittee to comply with the monitoring and reporting requirements of this Permit until written authorization to reduce, suspend, or terminate such monitoring and/or reporting is received by the Permittee from the Director.

E. OTHER REPORTING AND NOTIFICATION REQUIREMENTS

1. Anticipated Noncompliance

The Permittee shall give the Director written advance notice of any planned changes or other circumstances regarding a facility which may result in noncompliance with permit requirements.

2. Termination of Discharge

The Permittee shall notify the Director, in writing, when all discharges from any point source(s) identified on Page 1 of this Permit and described more fully in the Permittee's application have permanently ceased.

3. Updating Information

- a. The Permittee shall inform the Director of any change in the Permittee's mailing address or telephone number or in the Permittee's designation of a facility contact or officer(s) having the authority and responsibility to prevent and abate violations of the AWPCA, the AEMA, the Department's rules and regulations, and the terms and conditions of this Permit, in writing, no later than ten (10) days after such change. Upon request of the Director, the Permittee shall furnish the Director with an update of any information provided in the permit application.
- b. If the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information with a written explanation for the mistake and/or omission.

4. Duty to Provide Information

- a. The Permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, suspending, terminating, or revoking and reissuing this Permit, in whole or in part, or to determine compliance with this Permit. The Permittee shall also furnish to the Director upon request, copies of records required to be maintained by this Permit.
- b. The Permittee shall furnish to the Director upon request, within a reasonable time, available information (name, phone number, address, and site location) which identifies offsite sources of material or natural resources (mineral, ore, or other material such as iron, coal, coke, dirt, chert, shale, clay, sand, gravel, bauxite, rock, stone, etc.) used in its operation or stored at the facility.

F. SCHEDULE OF COMPLIANCE

The Permittee shall achieve compliance with the discharge limitations specified in Part I.A. of this Permit in accordance with the following schedule:

Compliance must be achieved by the effective date of this Permit.

PART II OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES

A. OPERATIONAL AND MANAGEMENT REQUIREMENTS

1. Facilities Operation and Management

The Permittee shall at all times operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities only when necessary to achieve compliance with the conditions of this Permit.

2. Best Management Practices (BMPs)

- a. Unless otherwise authorized in writing by the Director, the Permittee shall provide a means of subsurface withdrawal for any discharge from each point source identified on Page 1 of this Permit and described more fully in the Permittee's application. Notwithstanding the above provision, a means of subsurface withdrawal need not be provided for any discharge caused by a 24-hour precipitation event greater than a 10-year, 24-hour precipitation event.
- b. Dilution water shall not be added to achieve compliance with discharge limitations except when the Director has granted prior written authorization for dilution to meet water quality requirements.
- c. The Permittee shall minimize the contact of water with overburden, including but not limited to stabilizing disturbed areas through grading, diverting runoff, achieving quick growing stands of temporary vegetation, sealing acid-forming and toxic-forming materials, and maximizing placement of waste materials in back-fill areas.
- d. The Permittee shall prepare, submit to the Department for approval, and implement a Best Management Practices (BMPs) Plan for containment of any or all process liquids or solids, in a manner such that these materials do not present a potential for discharge, if so required by the Director. When submitted and approved, the BMP Plan shall become a part of this Permit and all requirements of the BMP Plan shall become requirements of this Permit.

e. Spill Prevention, Control, and Management

The Permittee shall prepare, implement, and maintain a Spill Prevention, Control and Countermeasures (SPCC) Plan acceptable to the Department that is prepared and certified by a Professional Engineer (PE), registered in the State of Alabama, for all onsite petroleum product or other pollutant storage tanks or containers as required by applicable state (ADEM Admin. Code r. 335-6-6-.12 (r)) and federal (40 C.F.R. §§112.1-.7) regulations. The Permittee shall implement appropriate structural and/or non-structural spill prevention, control, and/or management sufficient to prevent any spills of pollutants from entering a ground or surface water of the State or a publicly or privately owned treatment works. Careful consideration should be applied for tanks or containers located near treatment ponds, water bodies, or high traffic areas. In most situations this would require construction of a containment system if the cumulative storage capacity of petroleum products or other pollutants at the facility is greater than 1320 gallons. Any containment system used to implement this requirement shall be constructed of materials

compatible with the substance(s) contained and shall prevent the contamination of groundwater. Such containment systems shall be capable of retaining a volume equal to 110 percent of the capacity of the largest tank for which containment is provided. The applicant shall maintain onsite or have readily available flotation booms to contain, and sufficient material to absorb, fuel and chemical spills and leaks. Soil contaminated by chemical spills, oil spills, etc., must be immediately cleaned up or be removed and disposed of in an approved manner.

- f. All surface drainage and storm water runoff which originate within or enters the Permittee's premises and which contains any pollutants or other wastes shall be discharged, if at all, from a point source identified on Page 1 of this Permit and described more fully in the Permittee's application.
- g. The Permittee shall take all reasonable precautions to prevent any surface drainage or storm water runoff which originates outside the Permittee's premises and which contains any pollutants or other wastes from entering the Permittee's premises. At no time shall the Permittee discharge any such surface drainage or storm water runoff which enters the Permittee's premises if, either alone or in combination with the Permittee's effluent, the discharge would exceed any applicable discharge limitation specified in Part I.A. of this Permit.

3. Biocide Additives

- a. The Permittee shall notify the Director in writing not later than sixty (60) days prior to instituting the use of any biocide corrosion inhibitor or chemical additive in any cooling or boiler system(s) regulated by this Permit. Notification is not required for additives that should not reasonably be expected to cause the cooling water or boiler water to exhibit toxicity as determined by analysis of manufacturer's data or testing by the Permittee. Such notification shall include:
 - (1) Name and general composition of biocide or chemical;
 - (2) 96-hour median tolerance limit data for organisms representative of the biota of the water(s) which the discharge(s) enter(s);
 - (3) Quantities to be used:
 - (4) Frequencies of use;
 - (5) Proposed discharge concentrations; and
 - (6) EPA registration number, if applicable.
- b. The use of any biocide or chemical additive containing tributyl tin, tributyl tin oxide, zinc, chromium, or related compounds in any cooling or boiler system(s) regulated by the Permit is prohibited except as exempted below. The use of a biocide or additive containing zinc, chromium or related compounds may be used in special circumstances if (1) the permit contains limits for these substances, or (2) the applicant demonstrates during the application process that the use of zinc, chromium or related compounds as a biocide or additive will not pose a reasonable potential to violate the applicable State water quality standards for these substances. The use of any additive, not identified in this Permit or in the application for this Permit or not exempted from notification under this Permit is prohibited, prior to a determination by the Department that permit modification to control discharge of the additive is not required or prior to issuance of a permit modification controlling discharge of the additive.

4. Facility Identification

The Permittee shall clearly display prior to commencement of any regulated activity and until permit coverage is properly terminated, the name of the Permittee, entire NPDES permit number, facility or site name, and other descriptive information deemed appropriate by the Permittee at an easily accessible location(s) to adequately identify the site, unless approved otherwise in writing by the Department. The Permittee shall repair or replace the sign(s) as necessary upon becoming aware that the identification is missing or is unreadable due to age, vandalism, theft, weather, or other reason(s).

5. Removed Substances

Solids, sludges, filter backwash, or any other pollutants or other wastes removed in the course of treatment or control of wastewaters shall be disposed of in a manner that complies with all applicable Department rules and regulations.

6. Loss or Failure of Treatment Facilities

Upon the loss or failure of any treatment facility, including but not limited to the loss or failure of the primary source of power of the treatment facility, the Permittee shall, where necessary to maintain compliance with the discharge limitations specified in Part I.A. of this Permit or any other terms or conditions of this Permit, cease, reduce, or otherwise control production and/or discharges until treatment is restored.

7. Duty to Mitigate

The Permittee shall promptly take all reasonable steps to minimize or prevent any violation of this Permit or to mitigate and minimize any adverse impact to waters resulting from noncompliance with any discharge limitation specified in Part I.A. of this Permit, including such accelerated or additional monitoring of the discharge and/or the receiving waterbody as is necessary to determine the nature and impact of the noncomplying discharge.

B. BYPASS AND UPSET

1. Bypass

- a. Any bypass is prohibited except as provided in Parts II.B.1.b. and c.
- b. A bypass is not prohibited if:
 - (1) It does not cause any applicable discharge limitation specified in Part I.A. of this Permit to be exceeded;
 - (2) The discharge resulting from such bypass enters the same receiving water as the discharge from the permitted outfall;
 - (3) It is necessary for essential maintenance of a treatment or control facility or system to assure efficient operation of such facility or system; and
 - (4) The Permittee monitors the discharge resulting from such bypass at a frequency, at least daily, sufficient to prove compliance with the discharge limitations specified in Part I.A. of this Permit.

- c. A bypass is not prohibited and need not meet the discharge limitations specified in Part I.A. of this Permit if:
 - (1) It is unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the Permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The Permittee submits a written request for authorization to bypass to the Director at least ten (10) days, if possible, prior to the anticipated bypass or within 24 hours of an unanticipated bypass, the Permittee is granted such authorization, and Permittee complies with any conditions imposed by the Director to minimize any adverse impact to waters resulting from the bypass.
- d. The Permittee has the burden of establishing that each of the conditions of Parts II.B.1.b. or c. have been met to qualify for an exception to the general prohibition against bypassing contained in Part II.B.1.a. and an exemption, where applicable, from the discharge limitations specified in Part I.A. of this Permit.

2. Upset

- a. Except as provided in Parts II.B.2.b. and c., a discharge which results from an upset need not meet the applicable discharge limitations specified in Part I.A. of this Permit if:
 - (1) No later than 24-hours after becoming aware of the occurrence of the upset, the Permittee orally reports the occurrence and circumstances of the upset to the Director; and
 - (2) No later than five (5) days after becoming aware of the occurrence of the upset, the Permittee furnishes the Director with evidence, including properly signed, contemporaneous operating logs, design drawings, construction certification, maintenance records, weir flow measurements, dated photographs, rain gauge measurements, or other relevant evidence, demonstrating that:
 - An upset occurred;
 - (ii) The Permittee can identify the specific cause(s) of the upset;
 - (iii) The Permittee's treatment facility was being properly operated at the time of the upset; and
 - (iv) The Permittee promptly took all reasonable steps to minimize any adverse impact to waters resulting from the upset.
- b. Notwithstanding the provisions of Part II.B.2.a., a discharge which is an overflow from a treatment facility or system, or an excess discharge from a point source associated with a treatment facility or system and which results from a 24-hour precipitation event larger than a 10-year, 24-hour precipitation event is not exempted from the discharge limitations specified in Part I.A. of this Permit unless:

(1) The treatment facility or system is designed, constructed, and maintained to contain the maximum volume of wastewater which would be generated by the facility during a 24-hour period without an increase in volume from precipitation and the maximum volume of wastewater resulting from a 10-year, 24-hour precipitation event or to treat the maximum flow associated with these volumes.

In computing the maximum volume of wastewater which would result from a 10-year, 24-hour precipitation event, the volume which would result from all areas contributing runoff to the individual treatment facility must be included (i.e., all runoff that is not diverted from the mining area and runoff which is not diverted from the preparation plant area); and

- (2) The Permittee takes all reasonable steps to maintain treatment of the wastewater and minimize the amount of overflow or excess discharge.
- c. The Permittee has the burden of establishing that each of the conditions of Parts II.B.2.a. and b. have been met to qualify for an exemption from the discharge limitations specified in Part I.A. of this Permit.

C. PERMIT CONDITIONS AND RESTRICTIONS

1. Prohibition against Discharge from Facilities Not Certified

- a. Notwithstanding any other provisions of this Permit, if the permitted facility has not obtained or is not required to obtain a permit from the Alabama Surface Mining Commission, any discharge(s) from any point or nonpoint source(s) from the permitted facility which was not certified to the Department on a form approved by the Department by a professional engineer, registered in the State of Alabama, as being designed, constructed, and in accordance with plans and specifications reviewed by the Department is prohibited; or
- b. Notwithstanding any other provisions of this Permit, if the permitted facility has obtained or is required to obtain a permit from the Alabama Surface Mining Commission, any discharge(s) from any point or nonpoint source(s) from the permitted facility which is associated with a treatment facility which was not constructed and certified to the Alabama Surface Mining Commission pursuant to applicable provisions of said Commission's regulations, is prohibited until the Permittee submits to the Alabama Surface Mining Commission, certification by a professional engineer, registered in the State of Alabama, certifying that such facility has been constructed in accordance with plans and specifications approved by the Alabama Surface Mining Commission. This requirement shall not apply to pumped discharges from the underground works of underground coal mines where no surface structure is required by the Alabama Surface Mining Commission, provided the Department is notified in writing of the completion or installation of such facilities, and the pumped discharges will meet permit effluent limits without treatment.

2. Permit Modification, Suspension, Termination, and Revocation

- a. This Permit may be modified, suspended, terminated, or revoked and reissued, in whole or in part, during its term for cause, including but not limited to, the following:
 - (1) The violation of any term or condition of this Permit;

- (2) The obtaining of this Permit by misrepresentation or the failure to disclose fully all relevant facts:
- (3) The submission of materially false or inaccurate statements or information in the permit application or reports required by the Permit;
- (4) The need for a change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;
- (5) The existence of any typographical or clerical errors or of any errors in the calculation of discharge limitations;
- (6) The existence of material and substantial alterations or additions to the facility or activity generating wastewater which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;
- (7) The threat of the Permittee's discharge on human health or welfare; or
- (8) Any other cause allowed by ADEM Admin. Code ch. 335-6-6.
- b. The filing of a request by the Permittee for modification, suspension, termination, or revocation and reissuance of this Permit, in whole or in part, does not stay any Permit term or condition of this Permit.

3. Requirements for Metals, Cyanide, and Phenols Monitoring and Reporting

- a. For all outfalls, the Permittee shall collect a sample of the discharge to be analyzed for antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc, cyanide, and phenols no later six months following the effective date of the Permit. The analyses shall be submitted on EPA Form 2C and received by the Department no later than 28 days following six months after the effective date of the Permit.
- b. For all outfalls, should a discharge not occur within the first six months following the effective date of this Permit, the Permittee shall collect a sample of the discharge to be analyzed for antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc, cyanide, and phenols no later than six months following the date of the first discharge. The analyses shall be submitted on EPA Form 2C and received by the Department no later than 28 days following six months after the first discharge.
- c. Parts II.C.3.a. and b. do not apply for any outfall that is represented by analyses conducted at a substantially similar outfall as indicated on EPA Form 2C or 2D.
- d. The Permit shall be reopened, if required, to address any new information resulting from the completion and submittal of the data referenced in Parts II.C.3.a. and b.

4. Automatic Expiration of Permits for New or Increased Discharges

- a. Except as provided by ADEM Admin. Code r. 335-6-6-.02(g) and 335-6-6-.05, if this Permit was issued for a new discharger or new source, it shall expire eighteen months after the issuance date if construction has not begun during that eighteen month period.
- b. Except as provided by ADEM Admin. Code r. 335-6-6-.02(g) and 335-6-6-.05, if any portion of this Permit was issued or modified to authorize the discharge of increased

quantities of pollutants to accommodate the modification of an existing facility, that portion of this Permit shall expire eighteen months after this Permit's issuance if construction of the modification has not begun within eighteen month period.

- c. Construction has begun when the owner or operator has:
 - (1) Begun, or caused to begin as part of a continuous on-site construction program:
 - (i) Any placement, assembly, or installation of facilities or equipment; or
 - (ii) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
 - (2) Entered into a binding contractual obligation for the purpose of placement, assembly, or installation of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under the paragraph. The entering into a lease with the State of Alabama for exploration and production of hydrocarbons shall also be considered beginning construction.
- d. The automatic expiration of this Permit for new or increased discharges if construction has not begun within the eighteen month period after the issuance of this Permit may be tolled by administrative or judicial stay.

5. Transfer of Permit

This Permit may not be transferred or the name of the Permittee changed without notice to the Director and subsequent modification or revocation and reissuance of this Permit to identify the new Permittee and to incorporate any other changes as may be required under the FWPCA or AWPCA. In the case of a change in name, ownership, or control of the Permittee's premises only, a request for permit modification in a format acceptable to the Director is required at least 30 days prior to the change. In the case of a change in name, ownership, or control of the Permittee's premises accompanied by a change or proposed change in effluent characteristics, a complete permit application is required to be submitted to the Director at least 180 days prior to the change. Whenever the Director is notified of a change in name, ownership, or control, he may decide not to modify the existing Permit and require the submission of a new permit application.

6. Groundwater

Unless authorized on page 1 of this Permit, this Permit does not authorize any discharge to groundwater. Should a threat of groundwater contamination occur, the Director may require groundwater monitoring to properly assess the degree of the problem, and the Director may require that the Permittee undertake measures to abate any such discharge and/or contamination.

7. Property and Other Rights

This Permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, trespass, or any infringement of Federal, State, or local laws or regulations, nor does it authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any waters of the State or of the United States.

D. RESPONSIBILITIES

1. Duty to Comply

- a. The Permittee must comply with all terms and conditions of this Permit. Any permit noncompliance constitutes a violation of the AWPCA, AEMA, and the FWPCA and is grounds for enforcement action, for permit termination, revocation and reissuance, suspension, modification, or denial of a permit renewal application.
- b. The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the FWPCA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Permit has not yet been modified to incorporate the effluent standard, prohibition or requirement.
- c. For any violation(s) of this Permit, the Permittee is subject to a civil penalty as authorized by the AWPCA, the AEMA, the FWPCA, and <u>Code of Alabama</u> 1975, §§22-22A-1 et. seq., as amended, and/or a criminal penalty as authorized by <u>Code of Alabama</u> 1975, §22-22-1 et. seq., as amended.
- d. The necessity to halt or reduce production or other activities in order to maintain compliance with the conditions of this Permit shall not be a defense for a Permittee in an enforcement action.
- e. Nothing in this Permit shall be construed to preclude or negate the Permittee's responsibility or liability to apply for, obtain, or comply with other ADEM, Federal, State, or local government permits, certifications, licenses, or other approvals.
- f. The discharge of a pollutant from a source not specifically identified in the permit application for this Permit and not specifically included in the description of an outfall in this Permit is not authorized and shall constitute noncompliance with this Permit.
- g. The Permittee shall take all reasonable steps, including cessation of production or other activities, to minimize or prevent any violation of this Permit or to minimize or prevent any adverse impact of any permit violation.

2. Change in Discharge

- a. The Permittee shall apply for a permit modification at least 180 days in advance of any facility expansion, production increase, process change, or other action that could result in the discharge of additional pollutants, increase the quantity of a discharged pollutant, or that could result in an additional discharge point. This requirement also applies to pollutants that are not subject to discharge limitations in this Permit. No new or increased discharge may begin until the Director has authorized it by issuance of a permit modification or a reissued permit.
- b. The Permittee shall notify the Director as soon as it knows or has reason to believe that it has begun or expects to begin to discharge any pollutant listed as a toxic pollutant pursuant to Section 307(a) of the FWPCA, 33 U.S.C. §1317(a), any substance designated as a hazardous substance pursuant to Section 311(b)(2) of the FWPCA, 33 U.S.C. §1321(b)(2), any waste listed as a hazardous waste pursuant to Code of Alabama 1975, §22-30-10, or any other pollutants or other wastes which is not subject to any discharge limitations specified in Part I.A. of this Permit and was not reported in the Permittee's application, was reported in the Permittee's application in concentrations or mass rates

lower than that which the Permittee expects to begin to be discharged, or has reason to believe has begun to be discharged.

3. Compliance with Toxic or Other Pollutant Effluent Standard or Prohibition

If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Sections 301(b)(2)(C),(D),(E) and (F) of the FWPCA, 33 U.S.C. §1311(b)(2)(C),(D),(E), and (F); 304(b)(2) of the FWPCA, 33 U.S.C. §1314(b)(2); or 307(a) of the FWPCA, 33 U.S.C. §1317(a), for a toxic or other pollutant discharged by the Permittee, and such standard or prohibition is more stringent than any discharge limitation on the pollutant specified in Part I.A. of this Permit or controls a pollutant not limited in Part I.A. of this Permit, this Permit shall be modified to conform to the toxic or other pollutant effluent standard or prohibition and the Permittee shall be notified of such modification. If this Permit has not been modified to conform to the toxic or other pollutant effluent standard or prohibition before the effective date of such standard or prohibition, the authorization to discharge in this Permit shall be void to the extent that any discharge limitation on such pollutant in Part I.A. of this Permit exceeds or is inconsistent with the established toxic or other pollutant effluent standard or prohibition.

4. Compliance with Water Quality Standards and Other Provisions

- a. On the basis of the Permittee's application, plans, or other available information, the Department has determined that compliance with the terms and conditions of this Permit will assure compliance with applicable water quality standards. However, this Permit does not relieve the Permittee from compliance with applicable State water quality standards established in ADEM Admin. Code ch. 335-6-10, and does not preclude the Department from taking action as appropriate to address the potential for contravention of applicable State water quality standards which could result from discharges of pollutants from the permitted facility.
- b. Compliance with Permit terms and conditions notwithstanding, if the Permittee's discharge(s) from point source(s) identified on Page 1 of this Permit cause(s) or contribute(s) to a condition in contravention of State water quality standards, the Department may require abatement action to be taken by the Permittee, modify the Permit pursuant to the Department's rules and regulations, or both.
- c. If the Department determines, on the basis of a notice provided pursuant to Part II.C.2. of this Permit or any investigation, inspection, or sampling, that a modification of this Permit is necessary to assure maintenance of water quality standards or compliance with other provisions of the AWPCA or FWPCA, the Department may require such modification and, in cases of emergency, the Director may prohibit the noticed act until the Permit has been modified.

5. Compliance with Statutes and Rules

- a. This Permit has been issued under ADEM Admin. Code div. 335-6. All provisions of this division, that are applicable to this Permit, are hereby made a part of this Permit. A copy of this division may be obtained for a small charge from the Office of General Counsel, Alabama Department of Environmental Management, 1400 Coliseum Blvd., Montgomery, AL 36110-2059.
- b. This Permit does not authorize the noncompliance with or violation of any Laws of the State of Alabama or the United States of America or any regulations or rules implementing such laws. FWPCA, 33 U.S.C. Section 1319, and Code of Alabama 1975, Section 22-22-14.

6. Right of Entry and Inspection

The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

- a. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the Permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by the AWPCA, any substances or parameters at any location.

7. Duty to Reapply or Notify of Intent to Cease Discharge

- a. If the Permittee intends to continue to discharge beyond the expiration date of this Permit, the Permittee shall file with the Department a complete permit application for reissuance of this Permit at least 180 days prior to its expiration.
- b. If the Permittee does not desire to continue the discharge(s) allowed by this Permit, the Permittee shall notify the Department at least 180 days prior to expiration of this Permit of the Permittee's intention not to request reissuance of this Permit. This notification must include the information required in Part I.D.4.a and be signed by an individual meeting the signatory requirements for a permit application as set forth in ADEM Admin. Code r. 335-6-6-.09.
- c. Failure of the Permittee to submit to the Department a complete application for reissuance of this Permit at least 180 days prior to the expiration date of this Permit will void the automatic continuation of this Permit as provided by ADEM Admin. Code r. 335-6-6-.06, and should this Permit not be reissued for any reason, any discharge after the expiration of this Permit will be an unpermitted discharge.

PART III ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. CIVIL AND CRIMINAL LIABILITY

1. Tampering

Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained or performed under this Permit shall, upon conviction, be subject to penalties and/or imprisonment as provided by the AWPCA and/or the AEMA.

2. False Statements

Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be subject to penalties and/or imprisonment as provided by the AWPCA and/or the AEMA.

3. Permit Enforcement

This NPDES Permit is a Permit for the purpose of the AWPCA, the AEMA, and the FWPCA, and as such all terms, conditions, or limitations of this Permit are enforceable under State and Federal law.

4. Relief From Liability

Except as provided in Part II.B.1. (Bypass) and Part II.B.2. (Upset), nothing in this Permit shall be construed to relieve the Permittee of civil or criminal liability under the AWPCA, AEMA, or FWPCA for noncompliance with any term or condition of this Permit.

B. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this Permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject to under Section 311 of the FWPCA, 33 U.S.C. §1321.

C. AVAILABILITY OF REPORTS

Except for data determined to be confidential under <u>Code of Alabama</u> 1975, §22-22-9(c), all reports prepared in accordance with the terms of this Permit shall be available for public inspection at the offices of the Department. Effluent data shall not be considered confidential. Knowingly making any false statement in any such report may result in the imposition of criminal penalties as provided for in Section 309 of the FWPCA, 33 U.S.C. §1319, and <u>Code of Alabama</u> 1975, §22-22-14.

D. DEFINITIONS

- 1. Acid or ferruginous mine drainage means mine drainage which, before any treatment, either has a pH of less than 6 or a total iron concentration equal to or greater than 10 mg/l.
- Alabama Environmental Management Act (AEMA) means <u>Code of Alabama</u> 1975, §§22-22A-1 et. seq., as amended.
- Alabama Water Pollution Control Act (AWPCA) means <u>Code of Alabama</u> 1975, §§22-22-1 <u>et. seq.</u>, as amended.

- 4. Alkaline mine drainage means mine drainage which, before any treatment, has a pH equal to or greater than 6.0 and total iron concentration of less than 10 mg/l.
- 5. Average monthly discharge limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).
- Arithmetic Mean means the summation of the individual values of any set of values divided by the number of individual values.
- 7. BOD means the five-day measure of the pollutant parameter biochemical oxygen demand
- 8. Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
- CBOD means the five-day measure of the pollutant parameter carbonaceous biochemical oxygen demand.
- 10. Coal Mine means an area, on or beneath land, used or disturbed in activities related to the extraction, removal, or recovery of coal from natural or artificial deposits, including active mining and reclamation.
- Coal Preparation Plant means a facility where coal is subjected to cleaning, concentrating, or
 other processing or preparation in order to separate coal from its impurities and then is loaded for
 transit to a consuming facility.
- 12. Coal Preparation Plant Associated Areas means the coal preparation plant yards, immediate access roads, coal refuse piles and coal storage piles and facilities.
- 13. Coal Preparation Plant Water Circuit means all pipes, channels, basins, tanks, and all other structures and equipment that convey, contain, treat, or process any water that is used in coal preparation processes within a coal preparation plant.
- 14. Coal Refuse Disposal Pile means any coal refuse deposited on the earth and intended as permanent disposal or long-term storage (greater than 180 days) of such material, but does not include coal refuse deposited within the active mining area or coal refuse never removed from the active mining area.
- 15. Controlled Surface Mine Drainage means any surface mine drainage that is pumped or siphoned from the active mining area.
- Daily discharge means the discharge of a pollutant measured during any consecutive 24-hour period in accordance with the sample type and analytical methodology specified by the discharge permit.
- 17. Daily maximum means the highest value of any individual sample result obtained during a day.
- 18. Daily minimum means the lowest value of any individual sample result obtained during a day.
- Day means any consecutive 24-hour period.
- 20. Department means the Alabama Department of Environmental Management.

- 21. Director means the Director of the Department or his authorized representative or designee.
- 22. Discharge means "[t]he addition, introduction, leaking, spilling or emitting of any sewage, industrial waste, pollutant or other waste into waters of the state." Code of Alabama 1975, §22-22-1(b)(8).
- 23. Discharge monitoring report (DMR) means the form approved by the Director to accomplish monitoring report requirements of an NPDES permit.
- 24. DO means dissolved oxygen.
- 25. E. coli means the pollutant parameter Escherichia coli.
- 26. 8HC means 8-hour composite sample, including any of the following:
 - a. The mixing of at least 5 equal volume samples collected at constant time intervals of not more than 2 hours over a period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
 - b. A sample continuously collected at a constant rate over period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
- 27. EPA means the United States Environmental Protection Agency.
- 28. Federal Water Pollution Control Act (FWPCA) means 33 U.S.C. §§1251 et. seq., as amended.
- 29. Flow means the total volume of discharge in a 24-hour period.
- 30. Geometric Mean means the Nth root of the product of the individual values of any set of values where N is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For purposes of calculating the geometric mean, values of zero (0) shall be considered one (1).
- 31. Grab Sample means a single influent or effluent portion which is not a composite sample. The sample(s) shall be collected at the period(s) most representative of the discharge.
- 32. Indirect Discharger means a nondomestic discharger who discharges pollutants to a publicly owned treatment works or a privately owned treatment facility operated by another person.
- 33. Industrial User means those industries identified in the Standard Industrial Classification manual, Bureau of the Budget 1967, as amended and supplemented, under the category "Division D Manufacturing" and such other classes of significant waste producers as, by regulation, the Director deems appropriate.
- 34. mg/L means milligrams per liter of discharge.
- 35. MGD means million gallons per day.
- 36. Monthly Average means, other than for E. coli bacteria, the arithmetic mean of all the composite or grab samples taken for the daily discharges collected in one month period. The monthly average for E. coli bacteria is the geometric mean of daily discharge samples collected in a one month period. The monthly average for flow is the arithmetic mean of all flow measurements taken in a one month period. (Zero discharges shall not be included in the calculation of monthly averages.)

- 37. New Discharger means a person owning or operating any building, structure, facility or installation:
 - a. From which there is or may be a discharge of pollutants;
 - b. From which the discharge of pollutants did not commence prior to August 13, 1979, and which is not a new source; and
 - c. Which has never received a final effective NPDES permit for dischargers at that site.

38. New Source - means:

- a. A new source as defined for coal mines by 40 CFR Part 434.11 (1994); and
- b. Any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
 - (1) After promulgation of standards of performance under Section 306 of FWPCA which are applicable to such source; or
 - (2) After proposal of standards of performance in accordance with Section 306 of the FWPCA which are applicable to such source, but only if the standards are promulgated in accordance with Section 206 within 120 days of their proposal.
- 39. NH3-N means the pollutant parameter ammonia, measured as nitrogen.
- 40. 1-year, 24-hour precipitation event means the maximum 24-hour precipitation event with a probable recurrence interval of once in one year as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, or equivalent regional or rainfall probability information developed therefrom.
- 41. Permit application means forms and additional information that are required by ADEM Admin. Code r. 335-6-6-.08 and applicable permit fees.
- 42. Point Source means "any discernible, confined and discrete conveyance, including but not limited to any pipe, channel, ditch, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft from which pollutants are or may be discharged." Section 502(14) of the FWPCA, 33 U.S.C. §1362(14).
- 43. Pollutant includes for purposes of this Permit, but is not limited to, those pollutants specified in Code of Alabama 1975, §22-22-1(b)(3) and those effluent characteristics, excluding flow, specified in Part I.A. of this Permit.
- 44. Pollutant of Concern means those pollutants for which a water body is listed as impaired or which contribute to the listed impairment.
- 45. Preparation, Dry means a dry preparation facility within which the mineral/material is cleaned, separated, or otherwise processed without use of water or chemical additives before it is shipped to the customer or otherwise utilized. A dry preparation plant includes all ancillary operations and structures necessary to clean, separate, or otherwise process the mineral/material, such as storage areas and loading facilities. Dry preparation also includes minor water spray(s) used solely for dust suppression on equipment and roads to minimize dust emissions.
- 46. Preparation, Wet means a wet preparation facility within which the mineral/material is cleaned, separated, or otherwise processed using water or chemical additives before it is shipped to the

- customer or otherwise utilized. A wet preparation plant includes all ancillary operations and structures necessary to clean, separate, or otherwise process the mineral/material, such as storage areas and loading facilities. Wet preparation also includes mineral extraction/processing by dredging, slurry pumping, etc.
- 47. Privately Owned Treatment Works means any devices or system which is used to treat wastes from any facility whose operator is not the operator of the treatment works, and which is not a "POTW".
- 48. Publicly Owned Treatment Works (POTW) means a wastewater collection and treatment facility owned by the State, municipality, regional entity composed of two or more municipalities, or another entity created by the State or local authority for the purpose of collecting and treating municipal wastewater.
- 49. Receiving Stream means the "waters" receiving a "discharge" from a "point source".
- 50. Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- 51. 10-year, 24-hour precipitation event means that amount of precipitation which occurs during the maximum 24-hour precipitation event with a probable recurrence interval of once in ten years as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, or equivalent regional or rainfall probability information developed therefrom.
- 52. TKN means the pollutant parameter Total Kjeldahl Nitrogen.
- 53. TON means the pollutant parameter Total Organic Nitrogen.
- 54. TRC means Total Residual Chlorine.
- 55. TSS means the pollutant parameter Total Suspended Solids
- 56. Total Year-to-Date discharge limitation means the sum of the discharge mass flow rates of a pollutant on all previous days within a calendar year. For days when data has not been collected, the mass flow rates shall be assumed to be equal to the most recent calculated daily mass flow rate.
- 57. Treatment facility and treatment system means all structures which contain, convey, and as necessary, chemically or physically treat mine and/or associated preparation plant drainage, which remove pollutants limited by this Permit from such drainage or wastewater. This includes all pipes, channels, ponds, tanks, and all other equipment serving such structures.
- 58. 24HC means 24-hour composite sample, including any of the following:
 - a. The mixing of at least 12 equal volume samples collected at constant time intervals of not more than 2 hours over a period of 24 hours;
 - b. A sample collected over a consecutive 24-hour period using an automatic sampler composite to one sample. As a minimum, samples shall be collected hourly and each shall be no more than one twenty-fourth (1/24) of the total sample volume collected; or

- c. A sample collected over a consecutive 24-hour period using an automatic composite sampler composited proportional to flow.
- 59. 24-hour precipitation event means that amount of precipitation which occurs within any 24-hour period.
- 60. 2-year, 24-hour precipitation event means the maximum 24-hour precipitation event with a probable recurrence interval of once in two years as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, or equivalent regional or rainfall probability information developed therefrom.
- 61. Upset means an exceptional incident in which there is an unintentional and temporary noncompliance with technology-based permit discharge limitations because of factors beyond the control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate facilities, lack of preventive maintenance, or careless or improper operation.
- 62. Waters means "[a]ll waters of any river, stream, watercourse, pond, lake, coastal, ground or surface water, wholly or partially within the State, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership, or corporation unless such waters are used in interstate commerce." Code of Alabama 1975, §22-22-1(b)(2). "Waters" include all "navigable waters" as defined in §502(7) of the FWPCA, 33 U.S.C. §1362(7), which are within the State of Alabama.
- 63. Week means the period beginning at twelve midnight Saturday and ending at twelve midnight the following Saturday.
- 64. Weekly (7-day and calendar week) Average is the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The calendar week is defined as beginning on Sunday and ending on Saturday. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for the calendar week shall be included in the data for the month that contains the Saturday.

E. SEVERABILITY

The provisions of this Permit are severable, and if any provision of this Permit or the application of any provision of this Permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

F. PROHIBITIONS AND ACTIVIES NOT AUTHORIZED

- 1. Discharges from disposal or landfill activities as described in ADEM Admin. Code div. 335-13 are not authorized by this Permit unless specifically approved by the Department.
- 2. Relocation, diversion, or other alteration of a water of the State is not authorized by this Permit unless specifically approved by the Department.
- 3. Lime or cement manufacturing or production and discharge of process waters from such manufacturing or production is not authorized by this Permit unless specifically approved by the Department.

- Concrete or asphalt manufacturing or production and discharge of process waters from such manufacturing or production is not authorized by this Permit unless specifically approved by the Department.
- 5. The discharge of wastewater, generated by any process, facility, or by any other means not under the operational control of the Permittee or not identified in the application for this Permit or not identified specifically in the description of an outfall in this Permit is not authorized by this Permit.

PART IV SPECIAL REQUIREMENTS, RESTRICTIONS, AND LIMITATIONS

A. DISCHARGES TO IMPAIRED WATERS

- 1. This Permit does not authorize new sources or new discharges of pollutants of concern to impaired waters unless consistent with an EPA-approved or EPA-established Total Maximum Daily Load (TMDL) and applicable State law. Impaired waters are those that do not meet applicable water quality standards and are identified on the State of Alabama's §303(d) list or on an EPA-approved or EPA-established TMDL. Pollutants of concern are those pollutants for which the receiving water is listed as impaired or contribute to the listed impairment.
- 2. Facilities that discharge into a receiving stream which is listed on the State of Alabama's §303(d) list of impaired waters, and with discharges that contain the pollutant(s) for which the waters are impaired, must within six (6) months of the Final §303(d) list approval, document in its BMP plan how the BMPs will control the discharge of the pollutant(s) of concern, and must ensure that there will be no increase of the pollutants of concern. A monitoring plan to assess the effectiveness of the BMPs in achieving the allocations must also be included in the BMP plan.
- 3. If the facility discharges to impaired waters as described above, it must determine whether a TMDL has been developed and approved or established by EPA for the listed waters. If a TMDL is approved or established during this Permit cycle by EPA for any waters into which the facility discharges, the facility must review the applicable TMDL to see if it includes requirements for control of any water discharged by the Permittee. Within six (6) months of the date of TMDL approval or establishment, the facility must notify the Department on how it will modify its BMP plan to include best management practices specifically targeted to achieve the allocations prescribed by the TMDL, if necessary. Any revised BMP plans must be submitted to the Department for review. The facility must include in the BMP plan a monitoring component to assess the effectiveness of the BMPs in achieving the allocations.

B. PRECIPITATION EVENT DISCHARGE LIMITATIONS

1. Monitoring for Claims of Precipitation Event Discharge Limitation Exemption

Any sample of discharge collected in accordance with Parts I.C.1.a. and b. for which the Permittee submits a claim of exemption pursuant to Part IV.B.2., shall be collected within 48 hours after the commencement of the 24-hour precipitation event and prior to the cessation of the discharge or increased discharge. The sample shall be analyzed for each effluent characteristic as specified in Part I.A.2. Within 24 to 36 hours after the cessation of the 24-hour precipitation event, the Permittee shall collect an additional sample of the discharge and shall analyze such sample for each effluent characteristic specified in Part I.A.1. of this Permit.

2. Precipitation Event Discharge Limitation Exemption Submittal

Excluding discharges of drainage from the underground workings of an underground coal mine which are not commingled with other drainage eligible for precipitation event discharge limitations, any discharge or increase in the volume of a discharge which is caused by an applicable 24-hour precipitation event as described in Part IV.B.3. and which occurs during or within 24-hours after such event, may be exempt from the discharge limitations specified in Part I.A. provided that the discharge is addressed in Parts IV.B.4. through 8. and the Permittee submits a written claim of exemption to the Director with the DMR required to be submitted by Part I.D. of this Permit, which shall contain:

a. Persuasive evidence that the discharge or increase in the volume of a discharge was caused by an applicable 24-hour precipitation event;

- b. Persuasive evidence of the amount of precipitation occurring during the applicable 24-hour precipitation event;
- Persuasive evidence demonstrating the origin of the drainage causing a discharge;
- The day and time at which the 24-hour precipitation event commenced and ceased;
- e. The volume or amount in inches of the applicable 24-hour precipitation event, and
- f. The results of monitoring conducted pursuant to Part I.A. of this Permit, if required thereby.

3. Applicable 24-Hour Precipitation Events

Applicable 24-hour precipitation events include those that are greater than 1-year, 24-hour precipitation events or less than, equal to, or greater than 2-year, 24-hour precipitation events, and 10-year, 24-hour precipitation events.

4. 24-Hour Precipitation Event Greater Than a 1-Year, 24-Hour Precipitation Event, but Less Than a 10-Year, 24-Hour Precipitation Events

Discharge limitations listed in Part I.A.2. may apply to discharges of acid or ferruginous drainage from coal refuse disposal piles, provided that the Permittee has met the submittal requirements of Part IV.B.2., for any discharge or increase in the volume of a discharge caused by a 24-hour precipitation event greater than a 1-year, 24-hour precipitation event, but less than or equal to a 10-year, 24-hour precipitation event.

5. 24-Hour Precipitation Event Less Than or Equal to a 2-Year, 24-Hour Precipitation Event

Discharge limitations listed in Part I.A.2. may apply to discharges of drainage from acid or ferruginous mining areas (excluding discharges from steep slope mining areas, discharges from mountaintop removal operations, discharges from controlled surface mine, and discharges from underground workings of underground mines), provided that the Permittee has met the submittal requirements of Part IV.B.2., for any discharge or increase in the volume of a discharge caused by a 24-hour precipitation event less than or equal to a 2-year, 24-hour precipitation event.

6. 24-Hour Precipitation Event Greater Than a 2-Year, 24-Hour Precipitation Event, but Less Than a 10-Year, 24-Hour Precipitation Events

Discharge limitations listed in Part I.A.2. may apply to discharges of drainage from acid or ferruginous mining areas (excluding discharges from steep slope mining areas, discharges from mountaintop removal operations, discharges from controlled surface mine, and discharges from underground workings of underground mines), provided that the Permittee has met the submittal requirements of Part IV.B.2., for any discharge or increase in the volume of a discharge caused by a 24-hour precipitation event greater than a 2-year, 24-hour precipitation event, but less than or equal to a 10-year, 24-hour precipitation event.

7. 24-Hour Precipitation Event Less Than or Equal to a 10-Year, 24-Hour Precipitation Event

Discharge limitations listed in Part I.A.2. may apply to discharges of drainage from steep slope mining areas, discharges of drainage from mountaintop removal areas, discharges of alkaline drainage (excluding discharges from underground workings of underground mines and that are not commingled with other discharges), and discharges from coal preparation plant associated areas (excluding acid or ferruginous mine drainage from coal refuse disposal piles), provided that the Permittee has met the submittal requirements of Part IV.B.2., for any discharge or increase in the

volume of a discharge caused by a 24-hour precipitation event less than or equal to a 10-year, 24-hour precipitation event.

8. 24-Hour Precipitation Event Greater Than a 10-Year, 24-Hour Precipitation Event

Discharge limitations listed in Part I.A.2. may apply to discharges of drainage from alkaline, acid, or ferruginous mining areas, discharges of steep slope mining areas, discharges of drainage from mountaintop removal operations, discharges of drainage from coal preparation plants and associated areas, discharges of drainage from coal refuse piles, the underground workings of an underground coal mine which are commingled with other discharges eligible for precipitation event discharge limitations, and discharges from reclamation areas, provided that the Permittee has met the submittal requirements of Part IV.B.2., for any discharge or increase in the volume of a discharge caused by a 24-hour precipitation event greater than a 10-year, 24-hour precipitation event.

C. POST-MINING DISCHARGE LIMITATIONS

- 1. Excluding discharges from the underground workings of an underground coal mine, any discharge shall be exempt from the discharge limitations specified in Part I.A.1., provided that:
 - a. All mining in the drainage basin(s) associated with the discharge has ceased;
 - b. Revegetation has been established on all areas mined in the drainage basin(s) associated with the discharge;
 - c. The Permittee has been granted, in writing, a Phase II Bond Release, if applicable, by the ASMC for all areas mined in the drainage basin(s) associated with the discharge;
 - The Permittee has certified to the Director, in writing, its compliance with Parts IV.C.1.a. through c.; and
 - e. The Permittee's request for post-mining discharge limitations has been approved by the Department in writing.
- 2. Any discharge, which pursuant to Part IV.C.1. is exempt from the discharge limitations specified in Part I.A.1., shall be limited and monitored by the Permittee as specified in Part I.A.3.

D. pH EXEMPTION DISCHARGE LIMITATIONS

Where the application of neutralization and sedimentation treatment technology results in the Permittee's inability to comply with applicable total manganese discharge limitations, the daily maximum discharge limitation for pH shall be 10.5 s.u. However, the discharge shall not cause the in-stream pH values to deviate more than 1.0 s.u. from the normal or natural pH, nor be less than 6.0 s.u., nor greater than 8.5 s.u. Use of this exemption must be noted on the DMR Form when submitted for each eligible outfall. Documentation justifying the necessity for the exemption must be also be submitted at the time of the associated DMR submittal.

E. MANGANESE EXEMPTION DISCHARGE LIMITATIONS

Limitations and monitoring requirements for total manganese do not apply if the drainage, before any treatment, has a pH equal to or more than 6.0 s.u. and a total iron concentration of less than 10.0 mg/l. Use of this exemption must be noted on the Discharge Monitoring Report (DMR) form when submitted for each eligible outfall. Documentation of alkaline mine drainage before treatment must also be submitted at the time of the associated DMR submittal.

F. EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS FOR ACUTE TOXICITY

Except as provided below, the Permittee shall perform 48-hour acute toxicity screening tests on the discharges required to be tested for acute toxicity in Part I.A. of this Permit.

The Permittee may certify, in writing, that the activities at the site at the time of sample collection will result in representative discharges, and therefore perform the toxicity tests on only the samples collected from the representative outfalls. The certification must be signed by a responsible official of the Permittee as defined in ADEM Admin Code r. 335-6-6-0.09 and include the following statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

1. Test Requirements

- a. The tests shall be performed using undiluted effluent.
- b. Any test where survival in the effluent concentration is less than 90% and statistically lower than the control indicates acute toxicity and constitutes noncompliance with this Permit.

2. General Test Requirements

- a. A grab sample shall be obtained for use in above biomonitoring tests. The holding time for each sample shall not exceed 36 hours. The control water shall be a water prepared in the laboratory in accordance with the EPA procedure described in EPA 821-R-02-012 or most current edition or another control water selected by the Permittee and approved by the Department.
- b. Effluent toxicity tests in which the control survival is less than 90% or in which the other requirements of the EPA Test Procedure are not met shall be unacceptable and the Permittee shall rerun the tests as soon as practical within the monitoring period.
- c. In the event of an invalid test, upon subsequent completion of a valid test, the results of all tests, valid and invalid, are reported with an explanation of the tests performed and results.
- d. Should results from five consecutive testing periods indicate that the effluent does not exhibit acute toxicity, the Permittee may request, in writing, that the Toxicity monitoring and reporting requirements be suspended. It remains the responsibility of the Permittee to comply with the Toxicity monitoring and reporting requirements until written authorization to suspend the monitoring and reporting is received by the Permittee from the Director.

3. Reporting Requirements

a. The Permittee shall notify the Department in writing within 48 hours after toxicity has been demonstrated by the scheduled test(s).

b. Biomonitoring test results obtained during each monitoring period shall be summarized and reported using the appropriate Discharge Monitoring Report (DMR) form approved by the Department. In accordance with Section 6. of this part, an effluent toxicity report containing the information in Section 6. shall be included with the DMR. Two copies of the test results must be submitted to the Department no later than 28 days after the month in which the tests were performed.

4. Additional Testing Requirements

- a. If acute toxicity is indicated (noncompliance with permit limit), the Permittee shall perform two additional valid acute toxicity tests in accordance with these procedures. The toxicity tests shall be performed on new samples collected during the first discharge event after becoming aware of the acute toxicity. The additional samples shall be collected a minimum of 12 hours apart, or sooner if the discharge is not expected to continue for 12 hours. In the event that the discharge ceases prior to collection of the second additional sample, the sample shall be collected during the beginning of the next discharge event. The results of these tests shall be submitted no later than 28 days following the month in which the tests were performed. Additional testing sample collection and analysis timeframes may be extended, as necessary, to obtain the samples during discharges.
- b. After evaluation of the results of the additional tests, the Department will determine if additional action is appropriate and may require additional testing and/or toxicity reduction measures. The Permittee may be required to perform a Toxicity Identification Evaluation (TIE) and/or a Toxicity Reduction Evaluation (TRE). The TIE/TRE shall be performed in accordance with the most recent protocols/guidance outlined by EPA (e.g., EPA/600/2-88/062, EPA/600/R-92/080, EPA/600/R-92/081, EPA/833/B-99/022 and/or EPA/600/6-91/005F, etc.).

5. Test Methods

The tests shall be performed in accordance with the latest edition of the "EPA Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms" and shall be performed using the fathead minnow (*Pimephales promelas*) and the cladoceran (*Ceriodaphnia dubia*).

6. Effluent Toxicity Testing Reports

The following information shall be submitted with each discharge monitoring report unless otherwise directed by the Department. The Department may at any time suspend or reinstate this requirement or may increase or decrease the frequency of submittals.

- a. Introduction
 - (1) Facility Name, location and county
 - (2) Permit number
 - (3) Toxicity testing requirements of permit
 - (4) Name of receiving water body
 - (5) Contract laboratory information (if tests are performed under contract)
 - (i) Name of firm

(ii) Telephone number (iii) Address (6) Objective of test b. Plant Operations (1) Discharge operating schedule (if other than continuous) (2) Volume of discharge during sample collection to include Mean daily discharge on sample collection date (MGD, CFS, GPM) Source of Effluent Water and Dilution Water c. (1) Effluent samples (i) Sample point (ii) Sample collection dates and times Sample collection method (iii) (iv) Physical and chemical data of undiluted effluent samples (water temperature, pH, alkalinity, hardness, specific conductance, total residual chlorine (if applicable), etc.) (v) Sample temperature when received at the laboratory (vi) Lapsed time from sample collection to delivery (vii) Lapsed time from sample collection to test initiation (2) Dilution Water samples (i) Source (ii) Collection date(s) and time(s) (where applicable) (iii) Pretreatment (if applicable) (iv) Physical and chemical characteristics (pH, hardness, water temperature, alkalinity, specific conductivity, etc.) d. Test Conditions Toxicity test method utilized (1) (2) End point(s) of test (3) Deviations from referenced method, if any, and reason(s) (4) Date and time test started

Date and time test terminated

(5)

- (6) Type and volume of test chambers(7) Volume of solution per chamber
- (8) Number of organisms per test chamber
- (9) Number of replicate test chambers per treatment
- (10) Test temperature, pH and dissolved oxygen as recommended by the method (to include ranges)
- (11) Feeding frequency, and amount and type of food
- (12) Light intensity (mean)
- e. Test Organisms
 - (1) Scientific name
 - (2) Life stage and age
 - (3) Source
 - (4) Disease treatment (if applicable)
- f. Quality Assurance
 - (1) Reference toxicant utilized and source
 - (2) Date and time of most recent acute reference toxicant test(s), raw data, and current cusum chart(s)
 - (3) Results of reference toxicant test(s) (LC50, etc.), report concentration-response relationship and evaluate test sensitivity. The most recent reference toxicant test shall be conducted within 30-days of the routine.
 - (4) Physical and chemical methods utilized
- g. Results
 - (1) Provide raw toxicity data in tabular form, including daily records of affected organisms in each concentration (including controls) and replicate
 - (2) Provide table of endpoints: LC50, NOAEC, Pass/Fail (as required in the applicable NPDES permit)
 - (3) Indicate statistical methods used to calculate endpoints
 - (4) Provide all physical and chemical data required by method
 - (5) Results of test(s) (LC50, NOAEC, Pass/Fail, etc.), report concentration-response relationship (definitive test only), report percent minimum significant difference (PMSD)

- h. Conclusions and Recommendations
 - (1) Relationship between test endpoints and permit limits
 - (2) Action to be taken

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANGEMENT (ADEM) OUTFALL CERTIFICATION SUMMARY

FACILIT NPDES P	Y NAME: Blace PERMIT NO: ALC ERMIT NO:	bal Met Coal Coal ck Creek Mine 0081931 erson County			
Outfall	Is Outfall	Date of	Outfall	Post-Mining	Date of ADEM
Number	Certified?	Certification	Latitude and Longitude	Limit Approval Date	Monitoring Release
001-1	□ YES □ NO				
002-1	☐ YES ☐ NO				
003-1	☐ YES ☐ NO				
012-1	☐ YES ☐ NO				
direction properly persons information	or supervision in a gather and evaluat who manage the on, the information	e the information system, or those submitted is, to that there are sign	a system designe n submitted. Bas se persons direc the best of my k gnificant penaltie	tachments were presented to assure that quased on my inquiry entry responsible for nowledge and believes for submitting factories.	alified personnel of the person or r gathering the f, true, accurate,
Name and	l Title (Print)		Signature		Date
	□ Respons	ible Official	☐ Duly Authori	zed Representative	

ANTIDEGRADATION RATIONALE

Permit Number:

AL0081931

Facility Name:

Black Creek Mine

Receiving Water:

Coal Creek and Locust Fork

Stream Category:

Tier II as defined by ADEM Admin. Code 335-6-10-.12

Discharge Description:

Discharge of drainage from a coal surface mine

The following preliminary determination was prepared in accordance with ADEM Admin. Code 335-6-10-.12(7)(c):

The Department has reviewed the information submitted by applicant in accordance with ADEM Admin. Code 335-6-10-.12(9). The applicant has demonstrated that there are no technically or economically viable treatment options in its alternatives analysis that would completely eliminate a direct discharge.

The permit applicant has indicated that the following economic and/or social benefits will result from this project:

- 1. The Permittee would expect to layoff 30 employees if the permit is not issued. The facility will pay approximately \$614,200 in state and local taxes.
- 2. The Permittee submits that the issuance of the abovementioned permit would create support industries such as transportation companies, fuel/oil suppliers, industrial material suppliers, and power production systems.
- The facility is located in an area where pre-law surface mining took place, but 3. there was no reclamation for the site. This new permit will require a full reclamation of the site.

The Department has determined that the discharge proposed by the permit applicant is necessary for important economic and social development in the area of the outfall location in the receiving water.

Reviewed By:

Catherine A. McNeill November 12, 2013

Date:

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT WATER DIVISION

NPDES INDIVIDUAL PERMIT RATIONALE

Company Name:

Global Met Coal Corporation

Facility Name:

Black Creek Mine

County:

Jefferson

Permit Number:

AL0081931

Prepared by:

Whitney Bell

Date:

November 8, 2013

Receiving Waters:

Crooked Creek, Locust Fork

Permit Coverage:

New Source Coal Mine and Associated Areas

SIC Codes:

1221

The Department has made a tentative determination that the available information is adequate to support issuance of this permit.

This proposed permit covers a coal mine and associated areas.

This proposed permit authorizes treated discharges into stream segments, other State waters, or local watersheds that currently have a water quality classification of Fish and Wildlife (F&W) (ADEM Admin. Code r. 335-6-10-.09). If the requirements of the proposed permit are fully implemented, the facility will not discharge pollutants at levels that will cause or contribute to a violation of the F&W classification.

Full compliance with the proposed permit terms and conditions is expected to be protective of instream water quality and ensure consistency with applicable instream State water quality standards for the receiving stream.

The active mining discharge limitations (pH, Total Suspended Solids, Total Iron as Fe, and Total Manganese as Mn) and the technology based precipitation event discharge limitations are based on 40 CFR Part 434 and ADEM Admin. Code r. 335-6-10-.09.

The instream water quality standards for pH in streams classified as Fish and Wildlife is 6.0 - 8.5 s.u. per ADEM Admin Code 335-6-10-.09. However, due to the fact that discharges are expected only as a result of rain events, it is the opinion of the Department that discharges with an allowable pH daily maximum of 9.0 s.u. will not adversely affect the instream pH based on the low discharge/stream flow ratio. The proposed limitations have been shown to be protective of water quality.

40 CFR 434.62 allows the pH level in the final discharge to exceed 9.0 s.u. when neutralization and sedimentation treatment technology results in the Permittee's inability to comply with the applicable total manganese limitations. The acidity and metals composition of each discharge is unique and sometimes a pH value of 10.5 s.u. is necessary for the removal of manganese. However, the discharge shall not cause the in-stream pH to deviate more than 1.0 s.u from the normal or natural pH, nor be less than 6.0 s.u., nor greater than 8.5 s.u.

Post-mining discharge limitations are included in addition to the active mining and precipitation event discharge limitations. The post-mining discharge limitations are based on 40 CFR Part 434, Subpart E. This permit is more restrictive than the BAT Guidelines in that the Permittee, in order to qualify for the post-mining discharge

limitations, must have received a Phase II Bond Release from the Alabama Surface Mining Commission for all areas mined in the drainage basin(s) associated with the discharge. The reason a Phase II Bond Release is required for post-mining limitations rather than a Phase I Bond Release is that topsoil replacement and the commencement of revegetation are frequently important factors in controlling the effluent quality from a coal mine. The Department has determined that tying the post-mining discharge limitations to the Phase II Bond Release will effectively protect water quality in Alabama as it relates to coal mining.

Precipitation event discharge limitations are an alternate set of technology based limits afforded a facility under certain conditions, and they do not apply automatically. These alternative technology based limitations applicable during precipitation events are consistent with 40 CFR Part 434.63.

Because the applicant was unable to supply data from a representative discharge, the applicant requested to have water quality based limits for metals, cyanide, and arsenic on each outfall, to ensure that water quality criteria are not violated. The Department may use the reported information, as well as the other additional effluent and toxicity monitoring, to make future determinations as to whether or not a reasonable potential to cause or contribute to an excursion of numeric or narrative water quality standards exists.

If there is a reasonable potential that a pollutant present in the treated discharges from a facility could cause or contribute to a contravention of applicable State water quality standards above numeric or narrative criteria, 40 CFR §122 requires the Department to establish effluent limits using calculated water quality criterion, establish effluent limits on a case-by-case basis using criteria established by EPA, or establish effluent limits based on an indicator parameter. Based on available information, potential pollutants discharged from this facility, if discharged within the concentrations allowed by this permit, would not have a reasonable potential to cause or contribute to a contravention of applicable State water quality standards.

The applicant is proposing to remediate existing environmental impacts and support long-term improvement in water quality by remining and/or reclaiming inactive/abandoned areas that have been previously mined and left unreclaimed. The proposed permit will allow coal to be recovered and existing unreclaimed areas to be reclaimed to current regulatory standards. This should minimize existing uncontrolled discharges of sediment and other pollutants currently entering State waters.

The applicant is not proposing discharges of pollutant(s) to a water of the State with an approved Total Maximum Daily Load (TMDL).

This proposed permit authorizes treated discharges into a stream segment or other State water that is included on Alabama's current CWA §303(d) list for nutrients and siltation. 40 CFR 122.4(i) prohibits issuance of an NPDES permit to a new source or a new discharge if that treated discharge will cause or contribute to a violation of applicable State water quality standards in the receiving water.

ADEM maintains an Ecoregional Reference Reach Monitoring Program that monitors the least-disturbed watersheds throughout the state that represent the "best attainable condition" for comparison with other streams. The ecoregional reference TSS value for Ecoregion 68f is 14 mg/L. The Department has used this ecoregional reference value, the drainage area associated with each outfall, and the annual average flow for the each drainage area to calculate a total annual TSS loading that can be discharged from the outfalls to the impaired stream segment without contributing to the impairment. This annual loading value (3.14 tons/year) is addressed in the proposed permit as a Total Year-to-Date TSS limitation for the combined discharges from all outfalls to tributaries of the impaired segment. This limitation is imposed in addition to those limitations typically found in coal mining permits for this region. The Department believes these additional discharge limitations for the outfalls provide reasonable assurance that the pollutants will not be present in the discharge at levels of concern and/or the facility will not discharge pollutants at levels that will cause or contribute to a violation of applicable State water quality standards in the receiving water.

Monitoring and reporting of the nutrient-related parameter Nitrite plus Nitrate-Nitrogen (NO₂+NO₃-N) are imposed on all outfalls so that sufficient information will be available regarding the nutrient contribution from this point source, should it be necessary at some later time to impose additional nutrient limits on this discharge.

If the requirements of the proposed permit are fully implemented, there is reasonable assurance that the pollutants will not be present in the discharge at levels of concern and/or the facility will not discharge pollutants at levels that will cause or contribute to a violation of applicable State water quality standards in the receiving water.

The applicant is proposing new or increased/continuation of existing discharges of pollutants to an ADEM identified Tier 1 water. If the requirements of the proposed permit and pollution abatement plan are fully implemented, there is reasonable assurance that discharges from the facility will not contain pollutants of concern contributing to the Tier 1 condition, pollutants causing or contributing to the Tier 1 condition will not be present in the discharge at significant levels, and/or the facility will not discharge pollutants at levels that will cause or contribute to a violation of applicable State water quality standards in the Tier 1 water.

The proposed permit action authorizes new or increased discharges of pollutants to receiving waters determined by the Department to be waters where the quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water (Tier II). Pursuant to ADEM Admin. Code r. 335-6-10 (Antidegradation Policy and Implementation of the Antidegradation Policy), the applicant has submitted and the Department has reviewed/considered information regarding (1) demonstration of necessity/importance, (2) alternatives analysis, and (3) if required, calculations of total annualized costs for technically feasible treatment alternatives regarding the proposed new or increased discharges to Tier II waters. The Department has determined, based on the applicant's demonstration, that the proposed new or increased discharges to the Tier II waters are necessary for important economic or social development in the area in which the waters are located.

	Facility Nam	ne: Glob	Facility Name: Global Met Coal Corporation	orporation															
	NPDES No.: AL0081931	0: AL00	81931		Outfalls 001-1 through 003-1 ^{1,2,3}	hrough 003-1 ¹ .	2,3												
															Huma	Human Health Consumption Fish only (mg/l)	sumption F	ish only (mg	ŝ
	Freshwater F&W classification.	ification.			Freshw	Freshwater Acute (µg/l) Q _s =1Q10	Q _s =1Q10				Freshwat	Freshwater Chronic (µg/l) Q _s = 7Q10) Q ₅ = 7Q10			Carcinogen Q _s = Annual Average Non-Carcinogen Q _s = 7Q10	rcinogen Q _s = Annual Avera Non-Carcinogen Q _s = 7Q10	Average 7Q10	
Ð	Pollutant	RP?	RP? Carcinogen yes	Background Instream (Cs) Daily Max	Max Daty Discharge as reported by Applicant (C _{draxx})	Water Quality Criteria (C,)	Draft Permit Limit (C _{dnax})	20% of Draft Permit Limit	RP?	Background Instream (Cs) Monthly Ave	Avg Daily Discharge as reported by Applicant (Cassy)	Water Quality Draft Permit Criteria (C., Lirnit (C _{erva})		20% of Draft Permit Limit	Water Quality Critena (C,)		Draft Permit 20% Limit Perr	20% of Draft R	RP?
	1 Antimony	L		0	0	,	,] ,	•	0	0] 		- 3.73E+02	1.	2.79E+04 5.5	5.58E+03 N	Ŷ
	2 Arsenic		YES	Φ	0	674.603	37991.701	7598.340	ž	0	0	297.619	22248.853	4449.771	No 3.03E-01				ş
	3 Berylium			¢	0	,			(0	0	,	r						,
	4 Cadmium			0	0	7.715	434.511	86.902	ž	0	0	0.943	70.459	14.092	o _N				
	5 Chromium/ Chromium III			0	0	2863.133	161243.375	32248.675	ž	0	0	372.435	27841.789	_	No.				_
	6 Chromium/ Chromium VI			0	0	16.000	901.074	180.215	£	0	0	11.000	822.318		N _i o				
	7 Copper			0	0	40.973	2307.476	461.495	욷	0	0	27.304	2041.151		No 3.28E-01		2.45E+01 4.9	4.90E+00 N	۶
	8 Lead			0	0	371.157	20902.510	4180.502	£	0	0	14.463	1081,233		N				٠,
	9 Mercury			0	0	2.400	135.161	27.032	٤	0	0	0.012	0.897	0.179 N	No 1.40	.40E-01 1.05	.05E+01 2.1	2.10E+00 N	å
_	10 Nickel			0	0	1179.435	66422.382	13284.476	Š	0	0	130.999	9792.968	1958.594 N	No 2.50E	.50E+03 1.87	.87E+05 3.7	3.74E+04 N	٤
_	11 Selenium			0	o	20.000	1126.342	225.268	å	0	0	5.000	373.781	74.756 N	No 2.43E	.43E+03 1.82	1.82E+05 3.6	3.63E+04 N	å
_	12 Silver			0	ō	3.217	181.158	36.232	٥	0	0	•	,		_				,
_	13 Thallium			0	0	,	,		•	0	0	•	1		- 2.74	2.74E-01 2.05I	2.05E+01 4.0	4.09E+00 N	å
_	14 Zinc			0	0	437.241	24624.121	4924.824	g	0	0	440.817	32953.788	6590 758 N	No 5.56	5.56E+04 4.15I	4.15E+06 8.3		S
_	15 Cyanide			0	0	22.000	1238.976	247.795	ટ	0	0	5.200	388.732		No 9.33F		_		å
_	16 Total Phenolic Compounds			0	0	1		ı		0	0	1	•	•					_
_	17 Hardness (As CaCO3)			0	0	-		•	٠,	0	0	,	ı		<u> </u>			,	
	All outfalls discharge to receiving streams where the 2010 is 1,94 cfs and the mean average flow is 30.07 cfs. These are the promising stream flow years in the polyments.	siving str	eams where	the 7010 is 1.9	34 cfs and the	mean average	4 flow is 30.07	rfe These	are th	a raceivino etr	uley wolf meet	se used in the	andital define						1

All outfalls discharge to receiving streams where the 7Q10 is 1.94 cfs and the mean average flow is 30.07 cfs. These are the receiving stream flow values used in the calculations.

² Outfall 003-1 is reported to have the greatest discharge flow rate of 0.017 MGD. This is the discharge flow rate used in the calculations.

³ A hardness of 100 mg/L was used in this calculation.

	Facility Name	: 일 당	Facility Name: Global Met Coal Corporation	rporation															
	NPDES No.: AL0081931	AL00	31931		Outfall 012-1														
															H	man Health	Human Health Consumption Fish only (mg/l)	Fish only (n	Σg
	Freshwater F&W classification.	cation.			Freshw	Freshwater Acute (µg/l) Q _s =1Q10	Q _s =1Q10				Freshwate	Freshwater Chronic (µg/l) Q _s = 7Q10	Q _s = 7Q10			Carcinoge Non-C	Carcinogen Q _s = Annual Average Non-Carcinogen Q _s = 7Q10	al Average = 7Q10	
0	Pollutant	RP?	Carcinogen yes	Background Instream (Cs) Daily Max	Max Daily Discharge as reported by Applicant (C _{dmx}) ⁴	Water Quality Criteria (C,)	Draft Permit 20% of Draft Limit (C _{draxe}) Permit Limit		RP?	Background Instream (Cs) Monthly Ave	Avg Daily Discharge as reported by Applicant (Cdavg)	Water Quality Criteria (C,)	Draff Permit 20% of Draft Limit (C _{davq}) Permit Limit		RP? Crit	Water Quality Criteria (C,)	Draft Permit 20 Limit P (Cdavg)	20% of Draft Permit Limit	RP?
Γ	Antimony			0	0					0	0		,		3.	3.73E+02 3	341264.72	6.83E+04	ş
7	2 Arsenic		YES	0	0	674.603	462660,696	92532.139	õ	0	0	297.619	272054.144	54410.829	No 3.1	3.03E-01 1	15129,664	3.03E+03	ž
ന്	3 Berylium			0	0		,	,	,	0	0	•	,	·				1	,
4	4 Cadmium			0	0	7.715	5291.449	1058.290	S.	0	0	0.943	861.555	172.311	_S				,
ς,	5 Chromium/ Chromium III			0	0	2863.133	1963612.347	392722.469	ž	0	0	372.435	340443.353	_	٩		1		
9	6 Chromium/ Chromium VI			0	0	16.000	10973,223	2194,645	ž	0	0	11.000	10055.121	2011.024	٩	,	ı		•
۲-	7 Copper			0	0	40.973	28100.303	5620.061	S.	0	0	27.304	24958.748	4991,750	No 3.	3.28E-01 2	299.82543	6.00E+01	ž
00	8 Lead			0	0	371,157	254549,536	50909.907	õ	0	0	14.463	13221.085	2644.217	_S	,	,		,
o.	9 Mercury			0	0	2.400	1645.983	329,197	õ	0	0	0.012	10.969	2.194	No 1.	1.40E-01	128 41087	2.57E+01	ŝ
6	10 Nickel			0	0	1179.435	808887,860	161777.572	õ	0	0	130.999	119746.292	23949.258	No 2.5	2.50E+03 2	2286193.8	4.57E+05	ŝ
Ξ	11 Selenium			0	0	20.000	13716.529	2743.306	õ	0	0	5.000	4570.510	914.102	No 2.4	2.43E+03 2	2221775.5	4.44E+05	ŝ
12	12 Silver			0	0	3.217	2206.137	441.227	ş	0	0			1	,		,	1	,
5	13 Thallium			0	0	•	1	,	,	0	0		•	ı	. 2.	2.74E-01 2	250.06466	5.00E+01	ŝ
4	14 Zinc			0	0	437.241	299871.097	59974.219	8 N	0	0	440.817	402951.769	80590.354	No 5.5	5.56E+04 8	50799567	1.02E+07	ŝ
15	15 Cyanide			0	0	22.000	15088.182	3017.636	ž	0	0	5.200	4753.330	950.666	No 9.3	9.33E+03	8531618	1.71E+06	ŝ
16	16 Total Phenolic Compounds			0	0	0	٠		,	0	0	1	,	į	_	1	1	,	,
17	17 Hardness (As CaCO3)			0	0	•	1	1	_	0	0		ı	i				1	,
	1 All outfalls discharge to receiving streams when the 2010 is 25.42 at the moon when	ring oft	s and mea	the 7010 is 25	12 res and the		al flow is 1300 47 of Those are the room	47 of Thee	000	ľ	and the same of the same	ai boott confe	the polynomial						1

¹ All outfalls discharge to receiving streams where the 7Q10 is 25.43 cfs and the mean annual flow is 1390.47 cfs. These are the receiving stream flow values used in the calculations.

² Outfall 012-1 is reported to have the greatest discharge flow rate of 0 018 MGD. This is the discharge flow rate used in the calculations.

³ A hardness of 100 mg/L was used in this calculations

Loading (ton/acre/yr) 0.04823 0.04823 0.04823 0.04823 Annual TSS Loading {ton/yr} 0.77 0.48 1.06 0.82 Annual Average Flow (cfs/mi²) 2.24 2.24 2.24 2.24 2.24 Ecoregion Reference TSS (mg/L) Ecoregion 8 8 8 8 303(d) segment zzz Drainage mi² 0.02500 0.01563 0.03438 0.02656 Drainage Acres 10 12 17 Disturbed Acres 1 2 2 1 Distance to Receiving Water 021 021 031 33.758611 86.893611 33.75889 86.888889 33.756111 86.89 Longitude Latitude ADEM WUC F&W F&W F&W Crooked Creek Crooked Creek Crooked Creek Locust Fork Receiving Water Outfall 002-1 003-1 012-1 Action Issue Issue Issue Issue

3.14 ton/yr

Total Annual TSS Loading

0.10156

63

8

Background TSS Loading Calculations

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM) FIELD OPERATIONS DIVISION NPDES INDIVIDUAL PERMIT APPLICATION

SURFACE & UNDERGROUND MINERAL & ORE OR MINERAL PRODUCT MINING QUARRYING, EXCAVATION BORROWING, HYDRAULIC MINING, STORAGE, PROCESSING, PREPARATION, RECOVERY, HANDLING, LOADING, STORING, OR DISPOSING ACTIVITIES AND ASSOCIATED AREAS INCLUDING PRE-MINING SITE DEVELOPMENT, CONSTRUCTION, EXCAVATION, CLEARING, DISTURBANCE, RECLAMATION, AND ASSOCIATED AREAS P413-210397 C. McNeill

PLEASE READ THE ACCOMPANYING INSTRUCTIONS CAREFULLY BEFORE COMPLETING THIS FORM. COMPLETE ALL QUESTIONS. RESPOND WITH "N/A" AS APPROPRIATE. INCOMPLETE OR INCORRECT ANSWERS OR MISSING SIGNATURES WILL

DELAY PROCESSING. ATTACH ADDITI CONTINUE ON AN ATTACHED SHEET(S) A APPLICATION ARE NOT AUTHORIZED UN	S NECESSARY. COMM	MENCEMENT OF ACTIV	ITIES APP	LIED FOR AS DETAILED IN THIS
	PLEASE TYPE OR	PRINT IN INK ONLY.		2001001
I. APPLICANT INFORMATION Initial Issue	nnce: 🛛 Major Modif	ication: Reissuance	: NPD	es al_ <u>()081931_</u>
Reissuance	& Modification:	Minor Modification:	Transfer:	☐ Voluntary Termination: ☐
Company Name Global Met Coal Corp.		Facility Name Black C	reek Mine	
Responsible Official and Title George W. Hear Director	d, President, CEO, &	Facility Contact and Titl	e William	A. Cousins, Mine Manger
Mailing Address of Applicant 837 Hastings Stre	et, Suite 204	Facility Contact Street A	Address Rive	er Road
City Vancouver State BC, Canada	Zip V6C 3N6	City Mt. Olive	State	AL Zip 35117
Business Phone Number (604) 632-0085	Fax Number (604) 6	05-0009		Contact Phone Number this time
Responsible Official Street/Physical Address & F Street, Vancouver, BC, Canada V6C 3N6, (604	_	7. Heard, Suite 204, 837 I	Hastings	Email Address gwheard@shaw.ca
Registered Agent Name, Address, & Phone Num	ber William A. Cousins,	7468 Old Mt. Olive Road	d, Mt. Olive	e, AL 35117, (256) 368-8260
Identify the name, title/position, and unless waive partner, LLC member, investor, director, or perso beneficial owner of 10 percent or more of any cla decision making responsibility or authority for the	on performing a function ass of voting stock of the	similar to a director, of the	applicant, a	and each person who is the record or
Name Title/Position	n	Residence Address (PC	Box not ac	ceptable)
George W. Heard President		545 Ballentree Road,	West Vanco	ouver, B.C. Canada V6S1V9
			_	
II. OFFICER INFORMATION				172012
Name of each corporation, partnership, associated during the sixty (60) month period immediately pan officer, general partner, LLP partner, LLC meror more) stockholder:	receding the date on whi	ch this form is signed for v	which any in	dividual identified in Item I is or was
Name of corporation, partnership, association, or single proprietorship	Name of individua			in corporation, partnership, r single proprietorship
There are none				
III. LEGAL STRUCTURE OF APPLICANT				
☐ Corporation ☐ Association ☐	_	Single Proprietorship	Partner	
Government Agency	Uther		_	Other

Yes No If not an Individual or Single Proprietorship, applicant is properly registered with the Alabama Secretary of State's office. If "No", please explain:
Parent Corporation and Subsidiary Corporations of Applicant, if any:
Land owner(s): Christopher Renshaw, Willaim A. Cousins, & Isabelle J. Tombrello
Mining Sub-contractor(s)/Operator(s), If Known: There are none
IV. COMPLIANCE HISTORY
Has the applicant ever had (If the response to any item is yes, attach a letter of explanation.):
Yes No (a) an Alabama NPDES-SID-UIC permit suspended or terminated? Yes No (b) an Alabama license to mine suspended or revoked? Xes No
(c) an Alabama or federal mining permit suspended or terminated?
(d) a reclamation bond, or similar security deposited in lieu of a bond, or portion thereof, forfeited?
(e) a bond or similar security deposited in lieu of a bond, or portion thereof, the purpose of which was to secure compliance with any requirement of the Alabama Water Improvement Commission or Alabama Department of Environmental Management, forfeited?
Identify every Warning Letter, Notice of Violation (NOV), Administrative Action, Directive, or litigation filed by ADEM or EPA during the three year (36 months) period preceding the date on which this form is signed issued to the applicant, parent corporation, subsidiary, general partner, LLP partner, or LLC Member. Indicate the date of issuance, briefly describe alleged violations, list actions (if any) to abate alleged violations, and indicate date of final resolution:
<u>N/A</u>
V. PROPOSED SCHEDULE
Anticipated Activity schedule: Commencement date: 1/1/13 Completion date or year: 2018
Proposed Area of the Permitted site: Total area in acres: Disturbed area in acres:
VI. OTHER PERMITS/AUTHORIZATIONS
VI. OTHER PERMITS/AUTHORIZATIONS 1) List any other NPDES or other environmental permits, authorizations, or certifications that have been applied for or issued within the State by ADEM, EPA, Alabama Surface Mining Commission (ASMC), Alabama Department of Industrial Relations (ADIR), or other Agency, to the applicant, parent corporation, subsidiary, or LLC member for this facility whether presently effective, expired, suspended, or revoked (include permit numbers):
1) List any other NPDES or other environmental permits, authorizations, or certifications that have been applied for or issued within the State by ADEM, EPA, <u>Alabama Surface Mining Commission</u> (ASMC), <u>Alabama Department of Industrial Relations</u> (ADIR), or other Agency, to the applicant, parent corporation, subsidiary, or LLC member <u>for this facility</u> whether presently effective, expired, suspended, or revoked (include
1) List any other NPDES or other environmental permits, authorizations, or certifications that have been applied for or issued within the State by ADEM, EPA, Alabama Surface Mining Commission (ASMC), Alabama Department of Industrial Relations (ADIR), or other Agency, to the applicant, parent corporation, subsidiary, or LLC member for this facility whether presently effective, expired, suspended, or revoked (include permit numbers): ASMC Permit Pending, ADEM Permit Pending 2) List any other NPDES or other ADEM permits, authorizations, or certifications that have been applied for or issued within the State by ADEM, EPA, ASMC, or ADIR, to the applicant, parent corporation, subsidiary, or LLC member for other facilities whether presently effective, expired, suspended, or revoked (include permit numbers):
 List any other NPDES or other environmental permits, authorizations, or certifications that have been applied for or issued within the State by ADEM, EPA, Alabama Surface Mining Commission (ASMC), Alabama Department of Industrial Relations (ADIR), or other Agency, to the applicant, parent corporation, subsidiary, or LLC member for this facility whether presently effective, expired, suspended, or revoked (include permit numbers): ASMC Permit Pending, ADEM Permit Pending List any other NPDES or other ADEM permits, authorizations, or certifications that have been applied for or issued within the State by ADEM, EPA, ASMC, or ADIR, to the applicant, parent corporation, subsidiary, or LLC member for other facilities whether presently effective, expired,

VII. ACTIVITY DESCRIPTION & INFORMATION

VII. ACTIVITY DISCRIPTION & INFORMATION
Township(s), Range(s), Section(s)
Directions To Site From Mt. Olive, Alabama travel northwest on Mt. Olive Road approximately 6.7 miles to the intersection of Mt. Olive Road and River Road. Turn left onto River Road and travel approximately 0.7 miles to the mine entrance on the right.
Yes No Is/will this facility: Yes No (a)
VIII. PROPOSED ACTIVITY TO BE CONDUCTED - Check All that apply
Type(s) of activity presently conducted at applicant's existing facility or proposed to be conducted at proposed facility (check each one that applies): Surface mining Underground mining Auger mining Quarrying Hydraulic mining Mineral storing Within-bank mining Lime production Cement production Synthetic fuel production Alternative fuels operation Other beneficiation/manufacturing operations Chemicals used in process or wastewater treatment (coagulant, biocide, etc.) Mineral loading Mineral wet preparation Mineral dry processing (crushing & screening) Chemical processing or leaching Solution mining Construction related temporary borrow pits/areas Mineral transportation rail barge X truck Hydraulic mining, dredging, instream or between stream-bank mining Preparation plant waste recovery Onsite construction/mining waste/debris/equipment storing/disposing Excavation Grading , clearing, grubbing, etc. Reclamation of disturbed areas Pre-mining logging or land clearing Pre-construction ponded water removal Waterbody relocation or other alteration Adjacent/associated asphalt/concrete plant(s) Low volume sewage treatment package plant Creek/stream crossings Other (Describe): Other (Describe):
Primary SIC Code 1221 Description Surface mining and Auger mining of Bituminous coal.
Secondary SIC Code Description
Narrative Description: Surface mining of coal using mobile equipment and Auger Mining Final Highwall prior to reclamation
of the Activity
IX. MATERIAL TO BE REMOVED, PROCESSED, OR TRANSLOADED – List relative percentages for All that apply
List relative percentages of mineral(s) or mineral products presently mined, quarried, recovered, prepared, processed, handled, transloaded, or disposed at applicant's existing facility or to be mined, quarried, recovered, prepared, processed, handled, transloaded, or disposed at applicant's proposed facility. If more than one mineral is to be mined, list the relative proportions of each mineral by tonnage for the life of the mine.
Dirt-Chert Sand-Gravel Chalk Talc Crushed rock - other
Bentonite Industrial Sand Coal product, coke Marble Shale & Common Clay
LigniteFire clayIron oreCoal fines/refuse recovery
Slag, Red Rock Phosphate rock Granite Limestone, crushed limestone and dolomite
Bauxitic clay Kaolin Dimension stone Gold other trace minerals (be specific)
Bauxite ore (for Aluminum production) Other (be specific) Other (be specific)
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X. FUEL - CHEMICAL HANDLING, STORAGE & SPILL PREVENTION CONTROL & COUNTERMEASURES (SPCC) PLAN Will fuels, chemicals, compounds or liquid waste be used or stored onsite? Yes No If "yes", identify and indicate amount below: Contents Capacity Contents Capacity Contents Capacity 10,000 gallons **Diesel Fuel** 550 gallons Hydraulic Oil 550 gallons **Engine Oil** 10,000 gallons Diesel Fuel 550 gallons Waste Oil 550 gallons Transmission Fluid If "yes", a detailed SPCC Plan with acceptable format/content, including diagrams, must be attached to application according to ADEM Admin. Code R. 335-6-6-.12(r). Unless waived in writing by the Department on a programmatic, categorical, or individual compound/chemical basis, attach Material Safety Data Sheets (MSDS) for chemicals/compounds used or proposed to be used at the facility. XI. POLLUTION ABATEMENT & PREVENTION (PAP) PLAN Yes No ADEM 335-6-9 PAP and Appendix A & B Checklists have been completed and are attached as part of this application. Yes No A detailed PAP Plan with format/content acceptable to ADEM is attached to application according to ADEM Admin. Code R. 335-6-9-.03 and Appendices A & B, or has been submitted to ASMC according to submittal procedures for ASMC regulated facilities (see next response). If a coal facility, detailed mining and engineering design plan(s) are on file with or have been submitted to ASMC. 11/01/12 If response is "No", or if a coal facility and an application has not been filed with ASMC, please explain: XII. TOPOGRAPHIC MAP SUBMITTAL Attach to this application a 7.5 minute series U.S.G.S. topographic map(s) or equivalent map(s) no larger than, or folded to a size of 8.5 by 11 inches (several pages may be necessary) of the area extending to at least one mile beyond property boundaries. The topographic or equivalent map(s) must include a caption indicating the name of the topographic map, name of the applicant, facility name, county, and township, range, & section(s) where the facility is located. Unless approved in advance by the Department, the topographic or equivalent map(s), at a minimum, must show: (a) an outline of legal boundary of entire property (property lines and lease boundaries) (b) an outline of the facility (c) all existing and proposed disturbed areas (d) location of discharge areas (e) proposed and existing discharge points (f) perennial, intermittent, and ephemeral streams (g) lakes, springs, water wells, wetlands (h) all known facility dirt/improved access/haul roads (i) all surrounding unimproved/improved roads (j) high-tension power lines and railroad tracks (k) buildings and structures, including fuel/water tanks (l) contour lines, township-range-section lines (m) drainage patterns, swales, washes (n) all drainage conveyance/treatment structures (ditches, berms, etc.) (o) Any other pertinent or significant feature [symbols identified in Theodore D. Steger, Topographic Maps, U.S. Interior Dept., Geological Survey, 1978 (No. 0--274--961), as updated/revised] XIII. DETAILED FACILITY MAP SUBMITTAL Attach to this application a 1:500 scale or better, detailed auto-CAD map(s) or equivalent map(s) no larger than, or folded to a size of 8.5 by 11 inches (several pages may be necessary) of the facility. The facility or equivalent map(s) must include a caption indicating the name of the facility, name of the applicant, facility name, county, and township, range, & section(s) where the facility is located. Unless approved in advance by the Department, the facility or equivalent map(s), at a minimum, must show: (a) Information listed in Item XII (a) – (o) above (b) If noncoal, detailed, planned mining progression (c) location of mining or pond cleanout waste storage/disposal areas (d) If noncoal, location of topsoil storage areas (e) Other information relevant to facility or operation (f) location of facility sign showing permittee name, facility name, and NPDES Number

Pursuant to ADEM Admin. Code Chapter 335-6-1012(9), responses to the following questions must be provided by the applicant requesting NPDES permit coverage for new or expanded discharges of pollutant(s) to Tier 2 waters (except discharges eligible for coverage under general permits). As part of the permit application review process, the Department is required to determine, based on the applicant's demonstration, that the proposed new or increased discharge to Tier 2 waters is necessary for important economic or social development in the area in which the waters are located.
Yes. New/increased discharges of pollutant(s) or discharge locations to Tier 2 waters are proposed. Complete items 1 – 6 below.
No. New/increased discharges of pollutants(s) or discharge locations to Tier 2 waters are not proposed.
If "Yes", applicant is requesting issuance, modification, or reissuance & modification of permit coverage for new or expanded discharges of pollutant(s) not previously permitted. Complete this Item, Item XV, and Item XVI as necessary. Attach additional sheets/documentation and supporting information as needed.
1) What environmental or public health problem will the discharge be correcting? The Proposed facility is located in and area where pre- law surface mining disturbed some of the areas within this proposed facility. These areas are unreclaimed. Abandonment from the pre-law coal mining operations have left much of the terrain with existing highwalls approximately 60' to 100' in height and open pits of water approximately 20' deep in some areas. The above mentioned environmental and public health hazard can be eliminated with the issuance of this permit. These existing highwalls and open pits of water will be eliminated during the mining and reclamation phases at this site.
2) How much will the discharger be increasing employment (at its existing facility or as a result of locating a new facility)? None
3) How much reduction in employment will the discharger be avoiding?Without the reissuance of this permit thirty (30) jobs will be terminated
4) How much additional state or local taxes will the discharger be paying?The amount of state and local taxes paid is dependent on production, the present economic circumstances, present coal contracts and the present price of the coal. The following is an estimate of the annual state and local taxes that will be paid by the discharger: 1) Alabama State Witholding Taxes witheld and paid on employees \$69,623, 2) Alabama Unemployment Tax \$2,009.88, 3) Personal Property Tax \$41,643, 4) Business Privilage Tax \$3,506.84, 5) Excise Tax \$140,363, 6) Severance Tax \$85,227, 7) Permit Fees, Licenses \$26,027, 8) Sales Tax on equipment purchases \$36,166, 9) Sales Tax on equipment parts/repairs/supplies \$42,827, 10) Sales Tax on explosive products/accessories \$55,583, 11) Sales Tax on fuel/oil purchases \$111,204.
This facility will produce a high quality steam grade coal. The coal will be sold to Alabama Power Company for the generation of electricity. The Power Company must meet and exceed present electrical demands for the community to grow. With the issuance of this permit it will not only maintain its work force, but will also create support industries. Support industries such as transportation companies, fuel/oil suppliers, industrial material suppliers, and power production systems will all benefit from the issuance of this permit. Additional jobs will be required in the above support industries to service the needs of the coal mine. The local communities will benefit from the coal mine and support industries. The communities will also benefit through the increase in the tax revenues created by the increase in possible new business. As a result of the increase in possible new businesses and tax revenues, the communities will be able to provide additional services such as education, parks, and recreation, sanitation, transportation, fire protection, etc. The state and local communities will then benefit through the taxes collected from the sell of these reserves.
6) What economic or social benefit will the discharger be providing to the community? This facility will produce a high quality low sulfur coal that will be sold to Alabama Power Company and any spot market consumer. The high quality low sulfur coal, which will be mined at this facility, is in short supply in the state of Alabama. It is anticipated that this facility will produce approximately 150,000 – 200,000 tons of coal per year. This facility will be paying taxes to the local community and provide additional employment. Also, it will provide other industries the necessary product to produce materials that are necessary for maintaining the communities infrastructure. Also, the increased employment will increase the social and economic structure of the immediate community.

Pursuant to ADEM Admin. Code Chapter 335-6-10, an evaluation of the discharge alternatives identified below has been completed and the following conclusions, as indicated, were reached. All proposed new or expanded discharges of pollutant(s) covered by the Individual NPDES permitting program are subject to the provisions of the antidegradation policy. As part of the permit application review process, the Department is required to determine, based on the applicant's demonstration, that the proposed new or increased discharge to Tier 2 waters is necessary for important economic or social development in the area in which the waters are located. As a part of this demonstration, a registered professional engineer (PE) licensed to practice in the State of Alabama must complete an evaluation of the discharge alternatives, to include calculation of total annualized project costs (Item XVI) for each technically feasible alternative. Technically feasible alternatives with total annualized pollution control project costs that are less than 110% of the preferred alternative total annualized pollution control project costs for the Tier 2 new or increased discharge proposal are considered viable alternatives. Supporting documentation is attached, referenced, or otherwise handled as appropriate.

2) Land Application X Technically not feasible, See Attachment A 3) Pretreatment/Discharge to POTW By SID Permit X Technically not feasible, See Attachment A 4) Relocation of Discharge X Technically not feasible, See Attachment A 5) Reuse/Recycle - Pollution Prevention X Technically not feasible, See Attachment A 6) Other Process/Treatment Alternatives X Technically not feasible, See Attachment A 7) Underground Injection By UIC Permit X Technically not feasible, See Attachment A 8) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM 9) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM N/A Applicant Or The ADEM	Alternative	Viable	Non-Viable	Reason/Rationale For Indicating Non-Viable
3) Pretreatment/Discharge to POTW By SID Permit 4) Relocation of Discharge K Technically not feasible, See Attachment A 5) Reuse/Recycle – Pollution Prevention K Technically not feasible, See Attachment A 6) Other Process/Treatment Alternatives K Technically not feasible, See Attachment A 7) Underground Injection By UIC Permit K Technically not feasible, See Attachment A 8) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM 9) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM	1) Treatment/Discharge Proposed In This Application	x		
4) Relocation of Discharge X Technically not feasible, See Attachment A 5) Reuse/Recycle – Pollution Prevention X Technically not feasible, See Attachment A 6) Other Process/Treatment Alternatives X Technically not feasible, See Attachment A 7) Underground Injection By UIC Permit X Technically not feasible, See Attachment A 8) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM 9) Other Project Specific Alternative(s) Identified By the N/A	2) Land Application		X	Technically not feasible, See Attachment A
5) Reuse/Recycle – Pollution Prevention X Technically not feasible, See Attachment A 6) Other Process/Treatment Alternatives X Technically not feasible, See Attachment A 7) Underground Injection By UIC Permit X Technically not feasible, See Attachment A 8) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM 9) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM N/A Applicant Or The ADEM	3) Pretreatment/Discharge to POTW By SID Permit		X	Technically not feasible, See Attachment A
6) Other Process/Treatment Alternatives X Technically not feasible, See Attachment A 7) Underground Injection By UIC Permit X Technically not feasible, See Attachment A 8) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM 9) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM N/A Applicant Or The ADEM	4) Relocation of Discharge		X	Technically not feasible, See Attachment A
7) Underground Injection By UIC Permit 8) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM 9) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM N/A Applicant Or The ADEM	5) Reuse/Recycle - Pollution Prevention		X	Technically not feasible, See Attachment A
8) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM 9) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM N/A N/A	6) Other Process/Treatment Alternatives		X	Technically not feasible, See Attachment A
Applicant Or The ADEM 9) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM N/A	7) Underground Injection By UIC Permit		X	Technically not feasible, See Attachment A
Applicant Or The ADEM			N/A	
COMMENTS:			N/A	
	COMMENTS:			
-				
<u> </u>				

XVI. CALCULATION OF TOTAL ANNUALIZED PROJECT COSTS FOR PRIVATE SECTOR PROJECTS - ADEM Form 313 3/02 (ADEM Form 312 3/02 - Public Sector Project is available upon request)

This item must be completed for each technically feasible alternative blocks/sheets and supporting information as needed.	evaluated in Item XV.	Copy, complete, and attach additional
Capital Costs of pollution control project to be expended or financed by applicant (Supplied by applicant)	\$\$200,000(1)	While actual payback schedules may differ across projects and companies, assume equal annual
Interest Rate for Financing (Expressed as a decimal)	<u>0.10</u> (i)	payments over a 10-year period for consistency in comparing projects.
Time Period of Financing (Assume 10 years *)	10 years (n)	consistency in comparing projects.
Annualization Factor ** = $\frac{i}{(1+i)^{10}-1}$ + i i = Interest Rate	<u>0.16275</u> (2)	** Or refer to Appendix B (application information) for calculated annualization factors.
Annualized Capital Cost [Calculate: (1) x (2)]	\$ \$32,550 (3)	amuanzation factors.
Annual Cost of Operation & Maintenance (including but not limited to monitoring, inspection, permitting fees,		*** For recurring costs that occur less frequently than once a year, pro
waste disposal charges, repair, administration & replacement) ***	<u>\$ \$20,000 (4)</u>	rate the cost over the relevant number of years (e.g., for pumps
Total Annual Cost of Pollution Control Project [(3) + (4)]	\$\$52,550 (5)	replaced once every three years, include one third of the spet in the period of the spet in 001.30 2013

		G WATERS							
existing longitud disturbe	and "P" f de (to seco ed acres, th	permit Action for each outfator proposed, name of received onds) of location(s) that run-one number of drainage acres ADEM listed CWA Section 3	ing water(s) off enters the which will), ADEM water e receiving wat drain through ea	use classificati er, distance of ach treatment s	ion (WUC) for receiving water ystem, outfall,	r the receiving or from outfa , or BMP, ar	ng water, lat all in feet, no ad if the out	itude and ımber of fall
Action	Outfall E/P	Receiving Water	ADEM WUC	Latitude	Longitude	Distance to Rec. Water	Disturbed Acres	Drainage Acres	303(d) Segment (Y/N)
									, ,
		1	1						
			+						
XVIII.	DISCHAR	GE CHARACTERIZATION							
oper or in or o	rating facil ndividual of ther indus	to 40 CFR 122.21, the application will discharge treated sto compound/chemical basis that trial operations or wastewater ant does not request a waiver	rmwater on t chemical/ rs, includin	ly, unless waive compound addi g but not limite	ed in writing by tives are not us d to lime or cer	y the Departm sed, and that the ment production	ent on a prog here are no p on, synfuel o	grammatic, orocess, man	categorical, ufacturing,
		form 2C and/or 2D is not attac extra sheets. List expected aver							

No, th	ne applicant doe	s not rec	quest a v	vaiver and a c	omplete and o	correct	EPA form	2C and/or 2	2D is attac	hed.		
If necessa days per n	leted EPA form 20 ry, attach extra sh nonth, average su Il Manganese, BO	eets. Lis mmer an	st <u>expecte</u> d winter	ed average daily temperature of	discharge flow discharge(s) in	w rate ii degree	n gallons/da s centigrado	y and in cfs, c(C), average	frequency (of discharge	in hours pe	r day and
Outfall	Information	Flow	Flow	Frequency	Frequency	pН	BOD ₅	Sum/Win	TSS	Tot Fe	Tot Mn	Tot Al
E/P	Source - # of	cfs	gpd	hours/day	days/mnth	s.u.	lbs/day	Temp, C.	lbs/day	lbs/day	lbs/day	lbs/day
	Samples											

Please supply the following information separately for every P or E outfall. If necessary, attach extra sheets. Identify and list expected average daily discharge in pounds per day of any other pollutant(s) listed in EPA Form 2C, Item V – Intake And Effluent Characteristics, Parts A, B & C that are not referenced in XVIII above, that you know or there is reason to believe could be present in the discharge(s) at levels of concern. I/we (PE and applicant) certify that that I/we have reviewed the list of pollutants referenced in EPA Forms 2C & 2D, and the pollutants listed in EPA Form 2C and/or 2D that are not listed below are believed absent or not present at levels of concern in any proposed or existing discharge(s) from this facility: There are none.

Outfall Information Reason E/P Believed Source - # lbs/day lbs/day lbs/day lbs/day lbs/day lbs/day lbs/day lbs/day lbs/day Present of Samples

If a completed EPA form 2C and/or 2D is not attached, the applicant is required to detail existing and proposed point source(s) covered by this permit application. Specify outfall number(s) as it appears on the map(s) required by this application [if this application is for a modification to an existing permit do not change the numbering sequence of the permitted outfalls], describe each, e.g. pipe, spillway, channel, tunnel, conduit, well, discrete fissure, or container, and identify the origin of pollutants. The response must be precise for each outfall. If the discharge of pollutants from any outfall is the result of commingling of waste streams from different origins, each origin must be completely described. Please check all responses which describe the discharge origin.

Outfall	Discharge structure Description	Description of Origin Of pollutants	Surface Discharge	Groundwater Discharge	Wet Prep -Other Production Plant	Pumped or Controlled Discharge	Low Volume STP	Other

Origin of Pollutants – typical examples: (1) Discharge of drainage from the underground workings of an underground coal mine, (2) Discharge of drainage from a coal surface mine, (3) Discharge of drainage from a coal preparation plant and associated areas, (4) Discharge of process wastewater from a gravel-washing plant, (5) Discharge of wastewater from an existing source coal preparation plant, (6) Discharge of drainage from a sand and gravel pit, (7) Pumped discharge from a limestone quarry, (8) Controlled surface mine drainage (pumped or siphoned), (9) Discharge of drainage from mine reclamation, (10) Other:

XX. INFORMATION

Contact the Department <u>prior</u> to submittal with any questions or to request acceptable alternate content/format. Be advised that you are not authorized to commence regulated activity until this application can be processed, publicly noticed, and approval to proceed is received in writing from the Department.

EPA Form(s) 1 and 2F need not be submitted unless specifically required by the Department. EPA Form(s) 2C and/or 2D are required to be submitted unless the applicant is eligible for and the Department grants a waiver (Item XVIII-Discharge Information). Proposed activities described in this application for this facility qualify for coverage under ADEM Admin. Code Chapter 335-6-9 including Appendices A & B, and there are no other potential pollutants, processes, process wastewaters or activities that require permit coverage.

Coverage under the Department's NPDES Construction Stormwater Permit Program allows for short-lived, construction related, limited removal or relocation of offsite fill material, and does not provide coverage for mining activities described in ADEM Admin. Code Chapter 335-6-9 that exceeds or will exceed 5 un-reclaimed acres. Planned/proposed mining sites that are greater than 5 acres, that mine/process coal or metallic mineral/ore, or that have wet or chemical processing must apply for and obtain coverage under and Individual NPDES Permit prior to commencement of any land disturbance.

I understand by submission of this application, that I am advised to contact 1) the Alabama Surface Mining Commission (ASMC) if coal, coal fines, coal refuse, or other coal related materials are mined, transloaded, processed, etc., 2) the Alabama Department of Industrial Relations (ADIR) if conducting non-coal mining operations, 3) the Alabama Historical Commission for requirements related to any potential historic or culturally significant sites, 4) the Alabama Department of Conservation and Natural Resources (ADCNR) for requirements related to potential presence of threatened/endangered species, and 5) the US Army Corps of Engineers, Mobile or Nashville Districts, if this project could cause fill to be placed in federal waters or could interfere with navigation.

An information package, example PAP and SPCC plans, and other information are available upon request.

Complete this form, attach additional information as necessary, enclose appropriate processing fee (including Greenfield fee if applicable) and send to:

Field Operations Division - MNPS

Alabama Department of Environmental Management

Phone: (334) 394-4311

Fax: (334) 394-4326

Microsoft WORD 97

PO Box 301463

Montgomery, AL 36130-1463

1400 Coliseum Boulevard

Montgomery, AL 36110-2059

Email: mnps@adem.state.al.us

Internet Web Page: www.adem.state.al.us

XVII. RECEIVING WATERS

List the requested permit Action for each outfall (issue, reissue, add, delete, move, etc.), Outfall Designation including noting "E" for existing and "P" for proposed, name of receiving water(s), ADEM water use classification (WUC) for the receiving water, latitude and longitude (to seconds) of location(s) that run-off enters the receiving water, distance of receiving water from outfall in feet, number of disturbed acres, the number of drainage acres which will drain through each treatment system, outfall, or BMP, and if the outfall discharges to an ADEM listed CWA Section 303(d) waterbody segment at the time of application submittal.

Action	Outfall E/P	Receiving Water	ADEM WUC	Latitude	Longitude	Distance to Rec. Water	Disturbed Acres	Drainage Acres	303(d) Segment (Y/N)
Issue	001P	Crooked Creek	F&W	33° 45' 31"	86° 53' 37"	100'	16	16	N
Issue	002P	Crooked Creek	F&W	33° 45' 32"	86° 53' 20"	150'	10	10	N
Issue	003P	Crooked Creek	F&W	33° 45' 22"	86° 53' 24"	100'	22	22	N
Issue	012P	Locust Fork	F&W	33° 45' 23"	86° 53' 47"	100'	17	17	N
			_						
			_						

XVIII. DISCHARGE CHARACTERIZATION

Yes, pursuant to 40 CFR 122.21, the applicant requests a waiver for completion of EPA forms 2C and/or 2D and certifies that the
operating facility will discharge treated stormwater only, unless waived in writing by the Department on a programmatic, categorical,
or individual compound/chemical basis that chemical/compound additives are not used, and that there are no process, manufacturing,
or other industrial operations or wastewaters, including but not limited to lime or cement production, synfuel operations, etc.

No, the applicant does not request a waiver and a complete and correct EPA form 2C and/or 2D is attached.

If a completed EPA form 2C and/or 2D is not attached, the applicant is required to supply the following information separately for every P or E outfall. If necessary, attach extra sheets. List expected average daily discharge flow rate in gallons/day and in cfs, frequency of discharge in hours per day and days per month, average summer and winter temperature of discharge(s) in degrees centigrade (C), average daily discharge in pounds per day of Total Iron, Total Manganese, BOD₅, Total Aluminum (if bauxite or bauxitic clay), and Total Suspended Solids: Source of Information is from Best Professional Estimate.

Professional Estimate.												
Outfall	Information	Flow	Flow	Frequency	Frequency	pН	BOD ₅	Sum/Win	TSS	Tot Fe	Tot Mn	Tot Al
E/P	Source - # of	cfs	gpd	hours/day	days/mnth	s.u.	lbs/day	Temp, C.	lbs/day	lbs/day	lbs/day	lbs/day
	Samples			_								•
001P	BPE	0.027	17K	Precipitation	Precipitation	6-9	0.29	26/7	10	0.90	0.65	N/A
002P	BPE	0.017	10K	Precipitation	Precipitation	6-9	0.18	26/7	6	0.57	0.41	N/A
003P	BPE	0.038	24K	Precipitation	Precipitation	6-9	0.40	26/7	15	1.27	0.92	N/A
012P	BPE	0.029	18K	Precipitation	Precipitation	6-9	0.31	26/7	11	0.97	0.70	N/A
<u> </u>						<u> </u>						



XIX. DISCHARGE STRUCTURE DESCRIPTION AND POLLUTANT SOURCE

If a completed EPA form 2C and/or 2D is not attached, the applicant is required to detail existing and proposed point source(s) covered by this permit application. Specify outfall number(s) as it appears on the map(s) required by this application [if this application is for a modification to an existing permit do not change the numbering sequence of the permitted outfalls], describe each, e.g. pipe, spillway, channel, tunnel, conduit, well, discrete fissure, or container, and identify the origin of pollutants. The response must be precise for each outfall. If the discharge of pollutants from any outfall is the result of commingling of waste streams from different origins, each origin must be completely described. Please check all responses which describe the discharge origin.

Outfall	Discharge structure	Description of Origin	Surface	Groundwater	Wet Prep -Other	Pumped or	Low	Other
	Description	Of pollutants	Discharge	Discharge	Production Plant	Controlled	Volume	
						Discharge	STP	
001P	Pipe and/or Channel	(2) ,(8), (9), & (10)	X	N/A	N/A	N/A	N/A	N/A
002P	Pipe and/or Channel	(2), (8), (9), & (10)	X	N/A	N/A	N/A	N/A	N/A
003P	Pipe and/or Channel	(2), (8), (9), & (10)	X	N/A	N/A	N/A	N/A	N/A
012P	Pipe and/or Channel	(2), (8), (9), & (10)	X	N/A	N/A	N/A	N/A	N/A
				_				
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						

Origin of Pollutants – typical examples: (1) Discharge of drainage from the underground workings of an underground coal mine, (2) Discharge of drainage from a coal surface mine, (3) Discharge of drainage from a coal preparation plant and associated areas, (4) Discharge of process wastewater from a gravel-washing plant, (5) Discharge of wastewater from an existing source coal preparation plant, (6) Discharge of drainage from a sand and gravel pit, (7) Pumped discharge from a limestone quarry, (8) Controlled surface mine drainage (pumped or siphoned), (9) Discharge of drainage from mine reclamation, (10) Other: Dry Processing (Crushing and Screening)



Y	N		N ABATEMENT PLAN (PAP) - APPENDIX A& B INFORMATION Outfall(s): 001P-014P
	N	N/A	
<u> </u>			Runoff from all areas of disturbance is controlled
	74		Drainage from pit area, stockpiles, and spoil areas directed to a sedimentation pond Sedimentation basin at least 0.25 acre/feet for every acre of disturbed drainage
-	X1		Sedimentation basin at least 0.25 activities to every activities of distribed drainage. Sedimentation basin cleaned out when sediment accumulation is 60% of design capacity.
	X2		Trees, boulders, and other obstructions removed from pond during initial construction
	\ <u>\</u>		
	X3		Width of top of dam greater than 12'
_	X4		Side slopes of dam no steeper than 3:1 Cutoff trench at least 8' wide
<u> </u>			Side slopes of cutoff trench no less than 1:1
,			Cutoff trench located along the centerline of the dam
			Cutoff trench extends at least 2' into bedrock or impervious soil
(
	-		Cutoff trench filled with impervious material
			Embankments and cutoff trench 95% compaction standard proctor ASTM
			Embankment free of roots, tree debris, stones >6" diameter, etc.
			Embankment constructed in lifts no greater than 12"
			Spillpipe sized to carry peak flow from a one year storm event
(Spillpipe will not chemically react with effluent
			Subsurface withdrawal
	X5		Anti-seep collars extend radially at least 2' from each joint in spillpipe
(Splashpad at the end of the spillpipe
	X6		Emergency Spillway sized for peak flow from 25-yr 24-hr event if discharge not into PWS classified stream
	X7		Emergency spillway sized for peak flow from 50-yr 24-hr event if discharge is into PWS classified stream
(Emergency overflow at least 20' long
\sim			Side slopes of emergency spillway no steeper than 2:1
	X8		Emergency spillway lined with riprap or concrete
(Minimum of 1.5' of freeboard between normal overflow and emergency overflow
	X9		Minimum of 1.5' of freeboard between max. design flow of emergency spillway and top of dam
^			All emergency overflows are sized to handle entire drainage area for ponds in series
<u>`</u>			Dam stabilized with permanent vegetation
,			Sustained grade of haul road <10%
	X10		Maximum grade of haul road <15% for no more than 300'
Υ .			Outer slopes of haul road no steeper than 2:1
(Outer slopes of haul road vegetated or otherwise stabilized
		X11	Detail drawings supplied for all stream crossings
(Short-Term Stabilization/Grading And Temporary Vegetative Cover Plans
(Long-Term Stabilization/Grading And Permanent Reclamation or Water Quality Remediation Plans
·] The	e applic	cant has completed the surface water discharge alternatives analysis and has supporting documentation, including annualized costs
	for	each te	echnically feasible alternative available for review upon request
			ROVIDE DETAILED EXPLANATION FOR ANY "N" OR "N/A" RESPONSE(s):
K1)		by the	the design of each basin a sediment storage volume and detention volume will be determined and reviewed and approved ASMC.
(2)	;	Sedime	ent will be removed from each basin prior to the design sediment volume or level being reached.
(3)		The to	width of the dam will be no less thatn 12 feet wide as required by ASMC regulations.
(4)	-	The sid	le slopes of the embankment of each basin will be designed to provide a minimum static factor of safety of 1.3 as required b regulations.
(5)	İ	No anti impoui	seep collars are proposed along the discharge pipe as a result of the experience in the design and construction of adments of this nature by the designer. It has been the designer's experience that the addition of anti seep collars requires by excavation of the discharge structure trench for their installation. This over excavation and direct areas around the

X2)	Sediment will be removed from each basin prior to the design sediment volume or level being reached.
X3)	The top width of the dam will be no less thatn 12 feet wide as required by ASMC regulations.
X4)	The side slopes of the embankment of each basin will be designed to provide a minimum static factor of safety of 1.3 as required by ASMC regulations.
X5)	No anti seep collars are proposed along the discharge pipe as a result of the experience in the design and construction of impoundments of this nature by the designer. It has been the designer's experience that the addition of anti seep collars requires the over excavation of the discharge structure trench for their installation. This over excavation and direct areas around the devices produce areas where compaction during the filling of the trench is difficult to achieve. This results in areas of weakness where potential seeps could occur resulting in areas of impoundment instability and possible failure. The designer has designed and overseen construction of numerous impoundments of similar nature without the use of anti seep collars. To date no areas of seepage or instability has occurred as a result of the deletion of the anti seep collars. With the above in mind no anti seep collars are proposed in this design.
X6)	As per ASMC regulations the emergency spillways of each basin will be designed to pass a 25 year - 6 hour storm event.
X7)	This facility does not discharge to a public water supply.
X8)	The entire emergency overflow spillway channel from each basin will be a stabilized channel and will be stabilized upon completion of construction as specified within the detailed design plans using prudent engineering measures. These measures may consist of lining the spillway with concrete or a durable rock riprap, or the spillway being constructed in consolidated non-erodible material and planted with a mixture or both annual and perennial grasses, or a combination of any or all of the above.
X9)	During the design of each basin a minimum freeboard between normal overflow and emergency overflow will be determined and reviewed and approved by the ASMC.
X9)	ASMC regulations allow for a minimum freeboard of 1.0 feet from the maximum height of a 25 year - 6 hour storm event to the top of the dam.
X10)	ASMC regulations allow for a maximum grade of 17% on primary haulroads.
X11)	This facility does not require stream crossings.

XXII	. PO	LLUTI	ON ABATEMENT PLAN (PAP) REVIEW CHECKLIST
Υ	N	N/A	
X			PE Seal with License #
K			Name and Address of Operator
X			Legal Description of Facility
			General Information:
X			Name of Company
		X1	Number of Employees
X			Products to be Mined
		X1	Hours of Operation
X			Water Supply and Disposition
			Topographic Map:
X			Mine Location
		X 2	Location of Prep Plant
<u> </u>			Location of Treatment Basins
X			Location of Discharge Points
(Location of Adjacent Streams
			1"- 500' or Equivalent Facility Map:
(Drainage Patterns
			Mining Details
X			All Roads, Structures Detailed
(All Treatment Structures Detailed
			Detailed Design Diagrams:
<u> </u>			Plan Views
(Cross-section Views
X			Method of Diverting Runoff to Treatment Basins
			Narrative of Operations:
(Raw Materials Defined
			Processes Defined
X			Products Defined
			Schematic Diagram:
(Points of Waste Origin
X			Collection System
X			Disposal System
			Post Treatment Quantity and Quality of Effluent:
X			Flow
(Suspended Solids
(Iron Concentration
(На
			Description of Waste Treatment Facility:
<u> </u>			Pre-Treatment Measures
			Recovery System
(Expected Life of Treatment Basin
(Schedule of Cleaning and/or abandonment
			Other:
			Precipitation/Volume Calculations/Diagram Attached
			BMP Plan for Haul Roads
			Measures for Minimizing Impacts to Adjacent Stream i.e., Buffer Strips, Berms, etc.
			Methods for Minimizing Nonpoint Source Discharges
(Facility Closure Plans
		X 3	PE Rationale(s) For Alternate Standards, Designs or Plans
			PROVIDE DETAILED EXPLANATION FOR ANY "N" OR "N/A" RESPONSE(s):
(1) T	he nu	mber o	f employees and hours of operation will vary as the market demands.
(2) N	o pre	paratio	n plant will be located at this facility other than a dry processing area (crushing and screening).
(3) N	o elt	rnata o	tandards designs or plans are proposed
m) IN	o ante	ruate s	tandards, designs or plans are proposed.
-w) IN	o and	THAIC S	audatus, uesigns of plans are proposed.

A detailed, comprehensive Pollution Abatement/Prevention Plan (PAP) must be prepared, signed, and certified by a professional engineer (PE), registered in the State of Alabama as follows:

"I certify on behalf of the applicant, that I have completed an evaluation of discharge alternatives (Item XV) for any proposed new or increased discharges of pollutant(s) to Tier 2 waters and reached the conclusions indicated. I certify under penalty of law that technical information and data contained in this application, and a comprehensive PAP Plan including any attached SPCC plan, maps, engineering designs, etc. acceptable to ADEM, for the prevention and minimization of all sources of pollution in stormwater and authorized related process wastewater runoff has been prepared under my supervision for this facility utilizing effective, good engineering and pollution control practices and in accordance with the provisions of ADEM Admin. Code Division 335-6 sincluding Chapter 335-6-9 and Appendices A & B. If the PAP plan is properly implemented and maintained by the permitted discharge limitations can reasonably be expected to be effectively minimized to the maximum extent practicable and accordingly permit discharge limitations and other permit requirements. The applicant has been advised that appropriate pollution assaument practices or Department approved equivalent management practices as detailed in the PAP plan must be fully implemented and regularly maintained as needed at the facility in accordance with cook as detailed in the PAP plan must be fully implemented and regularly maintained as needed at the facility in accordance with cook as detailed in the PAP plan must be fully implemented and regularly maintained as needed at the facility in accordance with cook as detailed in the PAP plan must be fully implemented and regularly maintained as needed at the facility in accordance with cook as detailed in the PAP plan for the provision of
Address P. O. Box 1712, Jasper, AL 35502	PE Registration # 14117-E
Name and Title (type or print) <u>Leslie G. Stephens, P.E./P.L.S</u>	Phone Number (205) 295-3127
Signature Stylens	Date Signed $9/28/2012$

XXIV. RESPONSIBLE OFFICIAL SIGNATURE

This application must be signed by a Responsible Official of the applicant pursuant to ADEM Admin. Code Rule 335-6-6-.09 who has overall responsibility for the operation of the facility.

"I certify under penalty of law that this document, including technical information and data, the PAP plan, including any SPCC plan, maps, engineering designs, and all other attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the PE and other person or persons under my supervision who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine or imprisonment for knowing violations.

A comprehensive PAP Plan to prevent and minimize discharges of pollution to the maximum extent practicable has been prepared at my direction by a PE for this facility utilizing effective, good engineering and pollution control practices and in accordance with the provisions of ADEM Admin. Code Division 335-6, including Chapter 335-6-9 and Appendices A & B, and information contained in this application, including any attachments. I understand that regular inspections must be performed by, or under the direct supervision of, a PE and all appropriate pollution abatement/prevention facilities and structural & nonstructural management practices or Department approved equivalent management practices identified by the PE must be fully implemented prior to and concurrent with commencement of regulated activities and regularly maintained as needed at the facility in accordance with good sediment, erosion, and other pollution control practices and ADEM requirements. I understand that the PAP plan must be fully implemented and regularly maintained so that discharges of pollutants can reasonably be expected to be effectively minimized to the maximum extent practicable and according to permit discharge limitations and other requirements to ensure protection of groundwater and surface water quality. I understand that failure to fully implement and regularly maintain required management practices for the protection of groundwater and surface water quality may subject the permittee to appropriate enforcement action.

I certify that this form has not been altered, and if copied or reproduced, is consistent in format and identical in content to the ADEM approved form.

I further certify that the discharges described in this application have been tested or evaluated for the presence of non-stormwater discharges and any non-mining associated beneficiation/process pollutants and wastewaters have been fully identified."

Name (type or print) <u>George W. Heard</u>	Official Title	President, CEO, & Director	
Signature	Date Signed _	Aug. 30 2013	

ATTACHMENT A

2) Land Application

The Alabama Surface Mining Commission will not allow this method. As stated in Section 880-X-10C.(1) (a) and (b) of the Alabama Surface Mining Commission Regulations, all surface drainage from disturbed areas shall pass through an approved sedimentation pond, a series of sediment ponds or other treatment facilities before leaving the permit area. Other treatment facilities shall mean any chemical treatment system, such as flocculation or mechanical structures such as clarifers that have a point source discharge & are utilized to prevent additional contributions of suspended solids to stream flow. Also, the quantity of stormwater runoff from coal mining operations is to great to use this method.

3) Pretreatment/Discharge to POTW by SID Permit

There is no Publicly Owned Treatment Works Facility located in the general area of the mine site. This mine site is located in a very rural area with no POTW located within approximately 10 to 20 miles of the site.

4) Relocation of Discharge

Based on topographic mapping, aerial photography, and reconissance of the mine site existing and proposed outfalls are located at the most economically feasible locations to control surface runoff from the mine site. Also, the surrounding topography is of such steepness that the outfalls cannot be relocated.

5) Reuse/Recycle - Pollution Prevention

This is a coal recovery operation; there are no viable methods for the reuse/recycle of storm water from a mining operation, except for dust suppersion on haulroads. However, all discharge of storm water shall be made in compliance with all applicable state and federal water quality effluent limitation guidelines for coal mining operations as required by Section 880-X-10C-.13.(5) of the Alabama Surface Mining Commission Regulations.

6) Other Process/Treatment Alternatives

The Alabama Surface Mining Commission Regulations do not allow any other process or treatment alternatives of stormwater runoff other than treatment through approved sediment basins.

7) Underground Injection by UIC Permit

The steepness of the topography within the permit area will not allow this method to be utilized at this mine site.

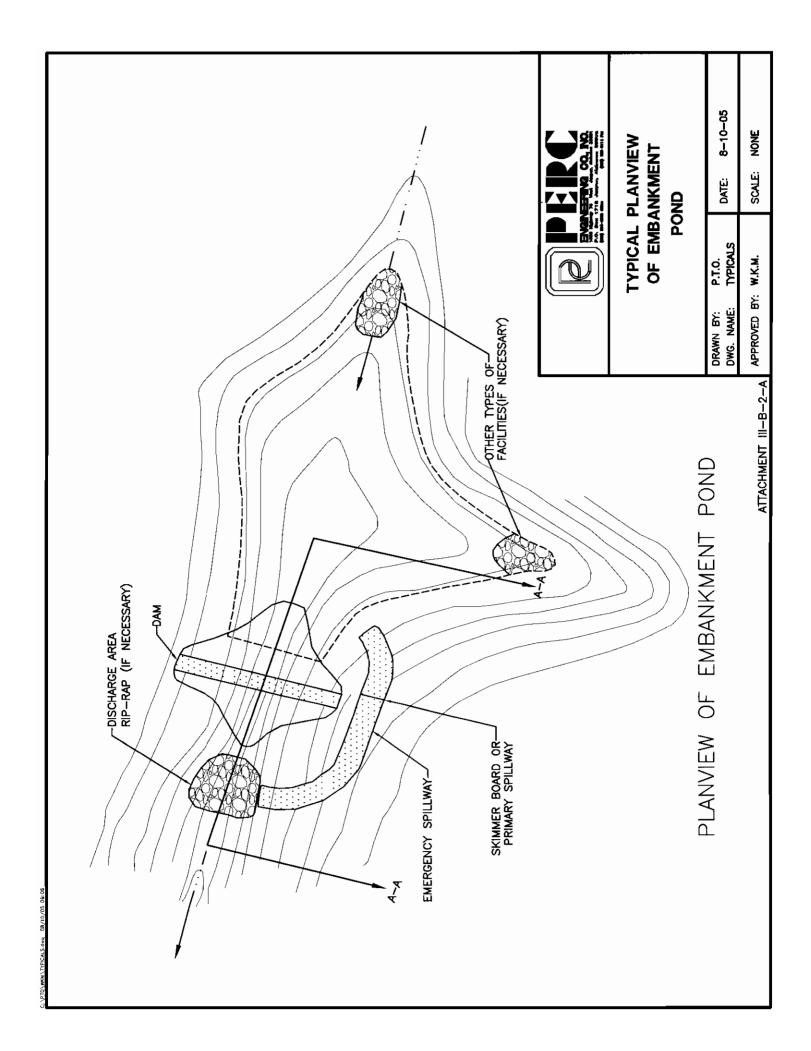
Pond Construction Criteria

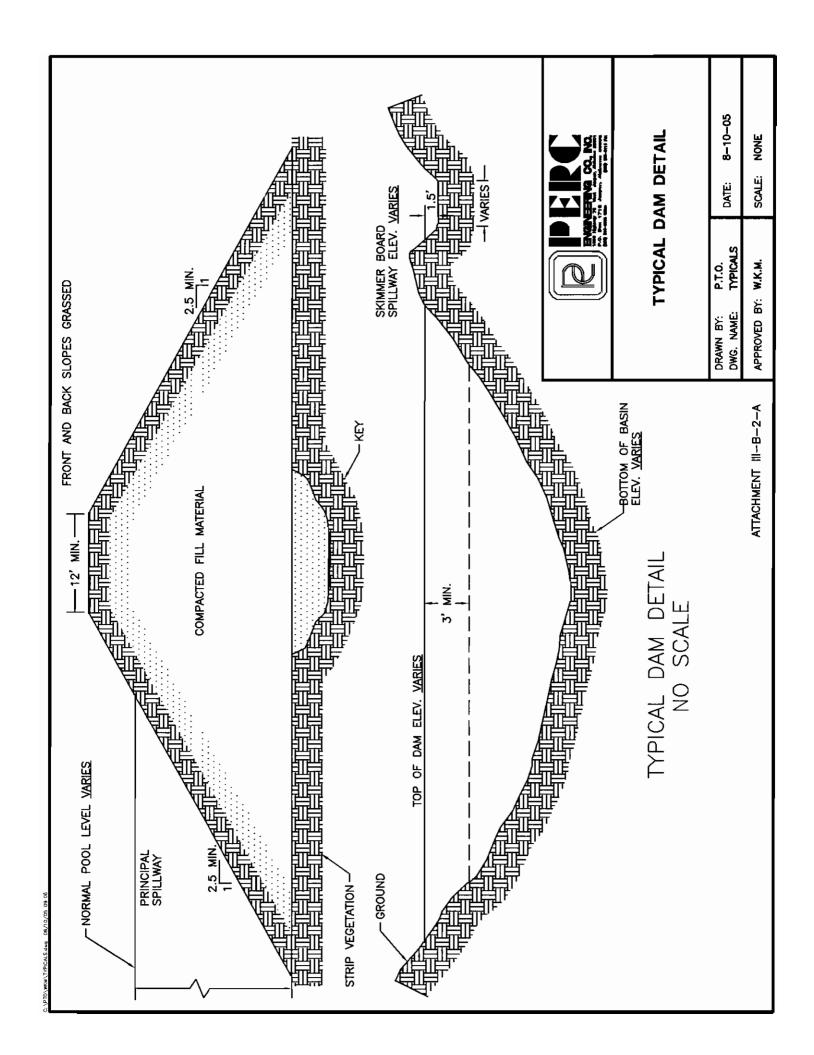
The embankment for sediment basins (temporary and permanent) shall be designed and built using the following as minimum criteria:

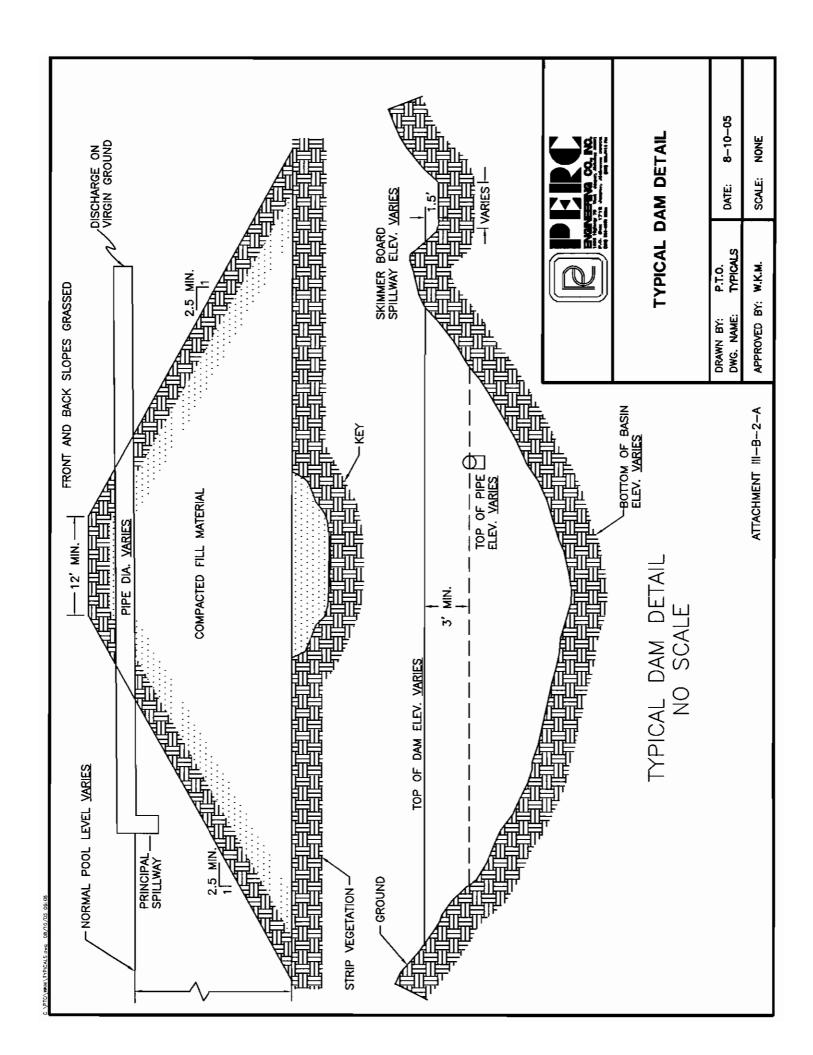
- 1. The top of the dam shall be no less than 12 feet wide.
- 2. See design sheet for maximum and minimum embankment slopes.
- 3. The foundation and abutments for the impounding structure shall be designed to be stable under all conditions of construction and operation of the impoundments, with a minimum static safety factor of 1.5 for the normal pool with steady seepage saturation conditions, and a seismic safety factor of at least 1.20.
- 4. The dam shall be constructed with a cutoff trench based upon prudent engineering practices for the site. The cutoff shall be located on the dam centerline and be of sufficient depth to extend into a relatively impervious material from which the core of the dam shall also be constructed.
- 5. The embankment foundation area shall be cleared of all organic matter, all surfaces sloped to no steeper than lv:lh, and the entire foundation surface scarified.
- 6. The entire embankment and cutoff trench shall be compacted to 95 percent density, based on standard proctor as outlined in ASTM.
- 7. The material placed in the embankment shall be free of sod, roots, stones over 6 inches in diameter, and other objectionable materials. The fill material shall be placed and spread over the entire fill area, starting at the lowest point of the foundation, in layers not to exceed 12 inches in thickness. Construction of the fill shall be undertaken only at such times that the moisture content of the fill material will permit satisfactory compaction in accordance with paragraph 5.
- 8. The pool area of the basin will be cleared of timber and large undergrowth.
- 9. The primary decant system when consisting of a pipe shall be installed according to Class C pipe installation for embankment bedding.
- 10. The primary decant system shall be equipped with a device, or constructed, such as to insure that subsurface withdrawal is accomplished to prevent discharge of floating solids. If a channel is used as the primary decant a skimmer shall be installed to prevent floating solids from discharging.

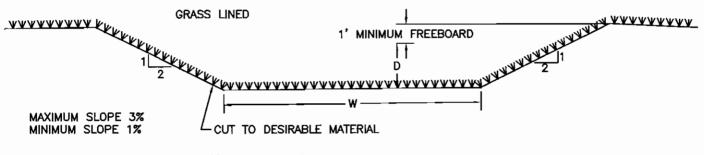
- 11. A splash pad or riprap may be required under the discharge of the primary decant system where necessary to insure that the discharge does not erode the embankment.
- 12. The combination primary and secondary decant system shall be designed to safely carry the expected peak flow from a 25 year 6 hour storm. The entire emergency overflow spillway channel will be a stabilized channel and will be stabilized upon completion of construction as specified within the detailed design plans using prudent engineering measures. These measures may consist of lining the spillway with concrete or a durable rock riprap, or the spillway being constructed in consolidated non-erodible material and planted with a mixture or both annual and perennial grasses, or a combination of any or all of the above.
- 13. Sediment basins using a single spillway system shall be an open channel of non-erodible construction consisting of concrete, durable rock riprap or its being constructed in consolidated non-erodible material as specified in the detailed design plans.
- 14. The settled embankment for temporary impoundments shall be a minimum of 1.0 foot above the maximum water elevation for the runoff from a 25 year 6 hour, or a 10 year 24 hour precipitation event (whichever has the greatest runoff). The settled embankment for permanent impoundments shall be a minimum of 1.0 foot above the maximum water elevation for the runoff from a 25 year 6 hour, or a 10 year 24 hour precipitation event (whichever has the greatest runoff).
- 15. If basins are built in series, then the combined decant system for each shall be designed to accommodate the entire contributing drainage area.
- 16. The dam and all disturbed areas shall be seeded with both perennial and annual grasses, fertilized and mulched in order to insure erosion is minimized. Hay bales or riprap may be placed at the toe of the dam immediately upon completion of construction.
- 17. The constructed height of the dam shall be increased a minimum of 5 percent over the design height to allow for settlement over the life of the embankment.
- 18. Final graded slopes of the entire permanent water impoundment area shall not exceed 2.5H-1.0V to provide for adequate safety and access for proposed water users.
- 19. Prior to Phase II bond release, additional data concerning water quality, water quantity, depth, size, configuration, postmining land use, etc., for each proposed permanent water impoundment, shall be submitted to the Regulatory Authority for permanent water impoundment approval.

- 20. All sediment basins will be inspected for stability, erosion, etc. two (2) times a month until removal of the structure or release of the reclamation bond.
- 21. The embankment and spillway will be maintained by repairing any damage such as erosion, slope failure or spillway damage until removal of the structure or release of the performance bond.
- 22. All ponds shall be examined quarterly for structural weakness, instability, erosion, or other hazardous conditions and maintenance performed as necessary. Formal inspections shall be made on an annual basis, including any reports or modifications, in accordance with 880-X-10C-.20[l(j)] of the Alabama Surface Mining Commission Regulations.
- 23. Sediment will be removed from each pond when the accumulated sediment reaches the sediment storage volume as shown on the detailed design sheet.
- 24. Upon completion of mining, successful reclamation and effluent standards being met, each sediment basin not remaining as a permanent water impoundment will be dewatered in an environmentally safe manner (such as siphoning, pumping, etc.) and reclaimed to approximate original contours by the following procedure: A permanent diversion channel (designed for a 10 year 24 hour precipitation event) shall be cut along the outer edge of the basin to re-route drainage around the basin and back through the stabilized spillway to allow reclamation of the sediment basin. The diversion channel shall be designed and grassed as per enclosed information. (See permanent diversion for basin disposal). Upon completion of the diversion channel the back slope of the dam shall be graded to a minimum 3H to 1V slope. The dewatered sediment basin area shall be seeded with some combination of the following: Fescue, bermuda, rye grass, canary grass and willows. After seeding the area shall be mulched. Any additional sediment or embankment material not used to meet original contour, if non-toxic, shall be spread in thin layers within the permit area and vegetated as stated in the approved reclamation plan. All toxic material encountered in the basin disposal shall be buried and covered with 4 feet of non-toxic material and vegetated as stated in the approved reclamation plan.
- 25. A qualified registered professional engineer or other qualified professional specialist, under the direction of the professional engineer shall conduct regular inspections during construction and upon completion shall inspect each basin for certification purposes.
- 26. Point source discharge embankments shall be constructed and abutments keyed into desirable material if at all possible. In the event that undesirable material is encountered, addition design and construction criteria shall be submitted prior to certification.









 $Q = \frac{1.49}{N}$ A $R^{2/3}$ S^{1/2} N(LOOSE STONE OR GRASS LINED) = 0.035

A = AREA

R = AREA/WETTED PERIMETER

S = SLOPE

* GRASS LINING: FESCUE, BERMUDA, RYE GRASS

DIVERSION CHANNEL	DEPTH (D)
FOR WIDTH (W)	8.0 FT.
PEAK FLOW	DEPTH
Q (CFS)	D (FT)
0-15	0.5
15-50	1.0
50-100	1.5
100-180	2.0
180270	2.5

DIVEDGION OLIANINE	DEDTH (D)	
DIVERSION CHANNEL DEPTH (D) FOR WIDTH (W) 12.0 FT.		
FOR WIDTH (W)	12.0 F1.	
PEAK FLOW	DEPTH	
Q (CFS)	D (FT)	
0-20	0.5	
20-70	1.0	
70-150	1.5	
150-250	2.0	
250-383	2.5	

DIVERSION CHANNEL DEPTH (D)		
FOR WIDTH (W)	10.0 FT.	
PEAK FLOW	DEPTH	
Q (CFS)	D (FT)	
0-15	0.5	
15-60	1.0	
60-120	1.5	
120-210	2.0	
210-320	2.5	

DIVERSION CHANNEL DEPTH (D)	
FOR WIDTH (W)	15.0 FT.
PEAK FLOW	DEPTH
Q (CFS)	D (FT)
0-25	0.5
25-90	1.0
90-180	1.5
180-300	2.0
300-450	2.5



TYPICAL PERMANENT DIVERSION FOR BASIN DISPOSAL

DRAWN BY: DWG. NAME:	S.D.M. TYPICALS	DATE:	1/4/2011
APPROVED BY:	L.G.S.	SCALE:	NONE

ATTACHMENT III-B-2-A

SPECIFICATIONS FOR THE CONSTRUCTION, MAINTENANCE AND RECLAMATION OF PRIMARY ROADS

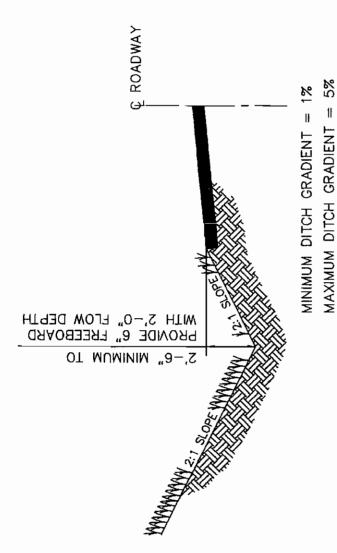
- Primary roads shall be designed by or under the direction of a registered professional engineer in accordance with the Alabama Surface Mining Commission rules and regulations and prudent engineering practice.
- 2. Each roadway embankment will be designed and constructed so as to have a minimum static safety factor of 1.3.
- 3. To the extent possible, roads will be located on ridges or on the most stable available slopes to prevent or minimize erosion, downstream sedimentation and flooding in an effort to prevent adverse effects to fish, wildlife and related environmental values.
- 4. To the extent possible, roads will be located above the sediment basins to be constructed for the mining operation in an effort to control or prevent additional contributions of suspended solids to stream flow or runoff outside the permit area and to comply with State and Federal water quality standards applicable to receiving waters and avoid the alteration of the normal flow of water in streambeds or drainage channels while preventing or controlling damage to public or private property. Where it is not possible or is impractical to locate roads in this manner, sediment control devices such as silt fencing, hay bale check dams and rock filter check dams will be used as necessary to maintain water quality. No fording of intermittent or perennial streams will be conducted unless specifically approved by the Alabama Surface Mining Commission as temporary routes to be used during road construction.
- 5. Prior to construction, the roadway will be cleared, grubbed and will have the topsoil removed. The clearing limits will be kept to the minimum necessary to accommodate the roadbed and associated ditch construction.
- 6. Roads will be constructed of suitable compacted subgrade material. The material will be free of sod, roots, stones over 12 inches in diameter, and other objectionable materials. The material will be placed and spread over the entire fill area, starting at the lowest point in layers not to exceed 12 inches in thickness. The material will be compacted to 95 percent of the density, based on standard proctor as outlined in ASTM.
- 7. Primary roads will have a minimum width of eighteen feet and a maximum width necessary to accommodate the largest equipment traveling the road.
- 8. Roadbeds will be cut to consolidated non-erodible material or will be surfaced with durable non-toxic, non-acid forming substances. The wearing surface will consist of durable sandstone, chert, crushed limestone, crushed concrete, crushed asphalt, red rock, ironore refuse, gravel, or other durable non-toxic, non-acid forming material approved by the Regulatory Authority. The wearing surface will be placed on the roadbed to a depth of four inches.

- 9. No sustained grades will exceed ten percent unless deemed necessary, in which case appropriate sediment control facilities will be constructed. If grades in excess of fifteen percent are required, cross drains, ditch relief drains and road drainways will be located at a minimum distance of three-hundred feet.
- 10. Roads will be constructed so as to have adequate drainage utilizing ditches, culverts, cross drains and ditch relief drains designed to safely pass the peak runoff from a ten year, six hour precipitation event. Drainage pipes and culverts shall be installed as designed and will be maintained in a free and operating condition to prevent and control erosion at inlets and outlets. Culverts have been designed to support the load of the heaviest equipment to travel the road and are based on the Handbook of Steel Drainage and Highway Construction Products by the American Iron and Steel Institute and the equipment specifications. Drainage ditches will be constructed and maintained in accordance with the approved design to prevent uncontrolled drainage over the road surface and embankment. Roads will not be located in the channel of an intermittent or perennial stream unless specifically approved by the Alabama Surface Mining Commission. Additionally, no relocation and/or alteration of an intermittent or perennial stream will be done unless specifically approved by the Alabama Surface Mining Commission. In the event that it becomes evident that any drainage structures including culverts, bridges and/or low water crossings will be required in order to cross an intermittent or perennial stream, the structure will be designed and constructed in accordance with Alabama Surface Mining Commission requirements and prudent engineering practice and the approval of the design(s) will be acquired prior to the commencement of construction. Hay bale check dams and silt fences will be used at strategic locations when necessary to control sediment runoff. Immediately upon completion of construction, the side slopes of the road embankments and/or cuts will be fertilized, seeded with annual and perennial grasses and mulch will be added to aid in the prevention of erosion and to enhance seed germination. The seed mix will consist of, but is not limited to, some combination of the following species: bermuda grass, fescue, lespedeza, rye grass, brown top millet, clover and vetch. The particular species to be planted will vary with the planting season at the time of seed application. Upon completion of construction of each phase of the roadway the construction will be certified to the Alabama Surface Mining Commission as having been done in accordance with the approved plans for the roadway and associated facilities.
- 11. Routine maintenance will be required to assure that the road continually meets performance standards and will consist of periodic grading, resurfacing, dust suppression and maintenance of sediment control facilities. Dust suppression will consist of the application of water, chemical binders and/or other dust suppressants. No oil will be utilized in this process. Spot seeding, fertilizing and mulching will be performed as necessary to improve vegetative cover on roadway slopes. A road damaged by a catastrophic event shall be repaired as soon as practicable after the damage has occurred.
- 12. Roads not to be retained as part of the post mine land use shall be reclaimed in accordance with the approved reclamation plan for this permit as soon as practicable after they are no longer needed as part of the mining and reclamation operation, using the following procedures:
 - a. The road will be closed to traffic.
 - b. All bridges, culverts and other drainage structures not approved as part of the post mine land use will be removed.
 - c. All road surfacing materials that are not compatible with the post mine land use or revegetation requirements will be properly disposed of on-site or removed from the site for re-use.

- d. Roadway cut and fill slopes shall be regraded and reshaped to be compatible with the post mine land use and to compliment the natural drainage pattern of the surrounding terrain.
- e. The natural drainage patterns shall be protected from surface runoff and erosion utilizing the installation of dikes and/or cross drains as necessary.
- f. The roadbed shall be ripped or scarified as necessary, the topsoil or substitute or approved growing medium shall be replaced and revegetated in accordance with the approved reclamation plan for this permit.
- 13. The drawings and data contained in the specific design plans illustrate typical roadbed configurations for primary roads as well as site specific design of drainage structures, stability analysis and ditch sections.

2-3-97 TYPICAL CUT SECTION PRIMARY HAUL ROAD SCALE: DATE -SHOULDERS TO BE GRASSED WEARING SURFACE OF DURABLE, NON-TOXIC, NON-ACID FORMING MATERIAL TYPHAULC K.D.P. APPROVED BY: S.R.I. DRAWN BY: DWG. NAME: TYPICAL HAUL ROAD ATTACHMENT III. - B. -5. VARIABLE - 20' MINIMUM - 18' MINIMUM CUT SECTION NO SCALE VARIABLE GRASSED WITH A SEASONAL MIXTURE OF PERENNIAL AND ANNUAL SPECIES DRAINAGE DITCHES TO BE -3,-0, MAXIMUM 2,-0, MINIMUM VARIES

-SLOPES TO BE GRASSED 2-3-97 TYPICAL FILL SECTION PRIMARY HAUL ROAD NONE SCALE: DATE: TYPHAULF K.D.P. APPROVED BY: S.R.I. DRAWN BY: DWG. NAME: - WEARING SURFACE OF DURABLE NON-TOXIC, NON-ACID FORMING MATERIAL ATTACHMENT III.-B.-5. TYPICAL HAUL ROAD - COMPACTED FILL MATERIAL FILL SECTION VARIABLE - 18' MINIMUM NO SCALE 3,-0, MAXIMUM 5,-0, MINIMUM VARIES DRAINAGE DITCHES TO BE—GRASSED WITH A SEASONAL MIXTURE OF PERENNIAL AND ANNUAL SPECIES

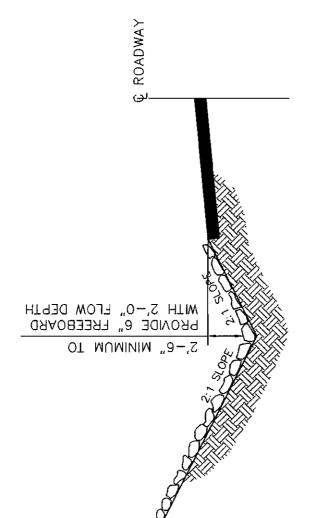


DITCH CHANNEL TO BE VEGETATED WITH A MIXTURE OF BERMUDA GRASS, FESCUE, AND LESPEDEZA TO CONFORM TO CLASS "D" RETARDANT CLASS.



TYPICAL PRIMARY ROADWAY DITCH CROSS SECTION

2-4-97	NONE
DATE:	SCALE:
DRAWN BY: K.D.P. DWG. NAME: PRIMROAD	APPROVED BY: R.E.P.



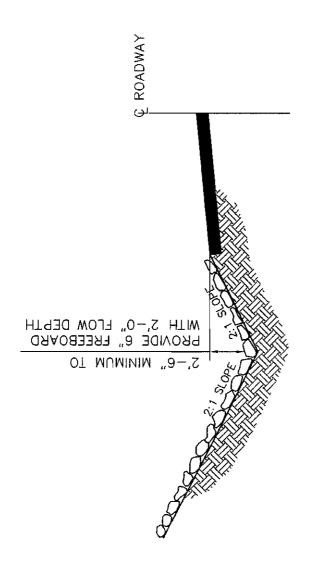
DITCH GRADIENT 5% TO 10%

DITCH CHANNEL TO BE LINED WITH NON-ERODIBLE NON-TOXIC, NON-ACID FORMING SANDSTONE OR LIMESTONE RIP-RAP WILL BE "CLASS 1" RIP-RAP AND HAVE A MINIMUM THICKNESS OF 12".



TYPICAL PRIMARY ROADWAY DITCH CROSS SECTION

11/8/2011	NONE
DATE:	SCALE: NONE
DRAWN BY: S.D.M.	;;



DITCH GRADIENT 11% TO 17%

DITCH CHANNEL TO BE LINED WITH NON-ERODIBLE NON-TOXIC, NON-ACID FORMING SANDSTONE OR LIMESTONE RIP-RAP. THE RIP-RAP WILL BE "CLASS 2" RIP-RAP AND HAVE A MINIMUM THICKNESS OF 16".



TYPICAL PRIMARY ROADWAY DITCH CROSS SECTION

11/8/2011		NONE
DATE.		SCALE:
S.D.M.	PRIMRD2	BY LGS.
DRAWN BY:	DWG, NAME:	APPROVED BY

SPECIFICATIONS FOR THE CONSTRUCTION, MAINTENANCE AND RECLAMATION OF ANCILLARY ROADS

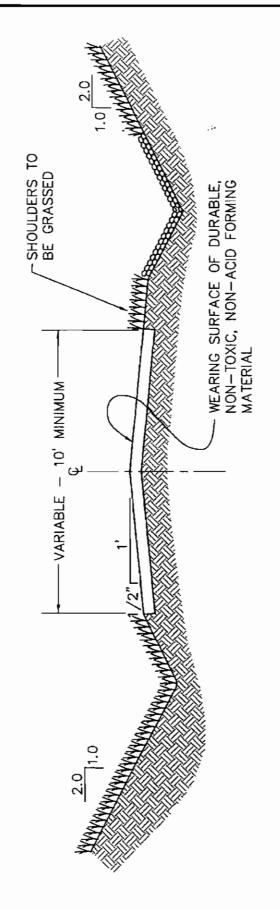
- 1. To the extent possible, roads will be located on ridges or on the most stable available slopes to prevent or minimize erosion, downstream sedimentation and flooding in an effort to prevent adverse effects to fish, wildlife and related environmental values.
- 2. To the extent possible, roads will be located above the sediment basins to be constructed for the mining operation in an effort to control or prevent additional contributions of suspended solids to stream flow or runoff outside the permit area and to comply with State and Federal water quality standards applicable to receiving waters and avoid the alteration of the normal flow of water in streambeds or drainage channels while preventing or controlling damage to public or private property. Where it is not possible or is impractical to locate roads in this manner, sediment control devices such as silt fencing, hay bale check dams and rock filter check dams will be used as necessary to maintain water quality.
- 3. Prior to construction, the roadway will be cleared, grubbed and will have the topsoil removed. The clearing limits will be kept to the minimum necessary to accommodate the roadbed and associated ditch construction.
- 4. Roads will be constructed of suitable compacted subgrade material. The material will be free of sod, roots, stones over 12 inches in diameter, and other objectionable materials. The material will be placed and spread over the entire fill area, starting at the lowest point in layers not to exceed 12 inches in thickness. The material will be compacted to 95 percent of the density, based on standard proctor as outlined in ASTM.
- 5. Ancillary roads will have a minimum width of ten feet and a maximum width necessary to accommodate the largest equipment traveling the road.
- 6. Roadbeds will be cut to consolidated non-erodible material or will be surfaced with durable non-toxic, non-acid forming substances. It is anticipated that durable sandstone overburden on site will be utilized as surfacing material. If there should not be adequate sandstone on site, then a durable sandstone material, chert, crushed limestone, crushed concrete, crushed asphalt, red rock, ironore refuse, gravel, or other durable non-toxic, non-acid forming material approved by the Regulatory Authority will be hauled in from off site and placed on the roadbed to a depth of two inches.
- No sustained grades will exceed ten percent unless deemed necessary, in which case appropriate sediment control facilities will be constructed. If grades in excess of fifteen percent are required, cross drains, ditch relief drains and road drainways will be located at a minimum distance of three-hundred feet.
- 8. Roads will be constructed so as to have adequate drainage utilizing ditches, cross drains and ditch relief drains. Roads will not be located in the channel of an intermittent or perennial stream unless specifically approved by the Alabama Surface Mining Commission. Additionally, no relocation and/or alteration of an intermittent or perennial stream will be done unless specifically approved by the Alabama Surface Mining Commission. In the event that it becomes evident that any drainage structures including culverts, bridges and/or low water crossings will be required in order to cross an intermittent or perennial

stream, the structure will be designed in accordance with Alabama Surface Mining Commission requirements and prudent engineering practice and the approval of the design(s) will be acquired prior to the commencement of construction. Hay bale check dams and silt fences will be used at strategic locations when necessary to control sediment runoff. Immediately upon completion of construction, the side slopes of the road embankments and/or cuts will be fertilized, seeded with annual and perennial grasses and mulch will be added to aid in the prevention of erosion and to enhance seed germination. The seed mix will consist of, but is not limited to, some combination of the following species: bermuda grass, fescue, lespedeza, rye grass, brown top millet, clover and vetch. The particular species to be planted will vary with the planting season at the time of seed application.

- 9. Routine maintenance will be required to assure that the road continually meets performance standards and will consist of periodic grading, resurfacing, dust suppression and maintenance of sediment control facilities. Dust suppression will consist of the application of water, chemical binders and/or other dust suppressants. No oil will be utilized in this process. Spot seeding, fertilizing and mulching will be performed as necessary to improve vegetative cover on roadway slopes. A road damaged by a catastrophic event shall be repaired as soon as practicable after the damage has occurred.
- 10. Roads not to be retained as part of the post mine land use shall be reclaimed in accordance with the approved reclamation plan for this permit as soon as practicable after they are no longer needed as part of the mining and reclamation operation, using the following procedures:
 - a. The road will be closed to traffic.
 - b. All bridges, culverts and other drainage structures not approved as part of the post mine land use will be removed.
 - c. All road surfacing materials that are not compatible with the post mine land use or revegetation requirements will be properly disposed of on-site or removed from the site for re-use.
 - d. Roadway cut and fill slopes shall be regraded and reshaped to be compatible with the post mine land use and to compliment the natural drainage pattern of the surrounding terrain.
 - e. The natural drainage patterns shall be protected from surface runoff and erosion utilizing the installation of dikes and/or cross drains as necessary.
 - f. The roadbed shall be ripped or scarified as necessary, the topsoil or substitute or approved growing medium shall be replaced and revegetated in accordance with the approved reclamation plan for this permit.
- 11. The following drawings illustrate typical roadbed configurations for ancillary roads.

-SLOPES TO BE GRASSED ANCILLARY HAUL ROAD 2-3-97 TYPICAL FILL SECTION NONE SCALE DATE: TYPHAULA K.D.P. APPROVED BY: S.R.I. DRAWN BY: DWG. NAME: WEARING SURFACE OF DURABLE NON-TOXIC, NON-ACID FORMING MATERIAL ATTACHMENT III.-B.-5. TYPICAL HAUL ROAD - COMPACTED FILL MATERIAL FILL SECTION VARIABLE - 10' MINIMUM NO SCALE SLOPES TO --BE GRASSED

TYPICAL HAUL ROAD CUT SECTION NO SCALE

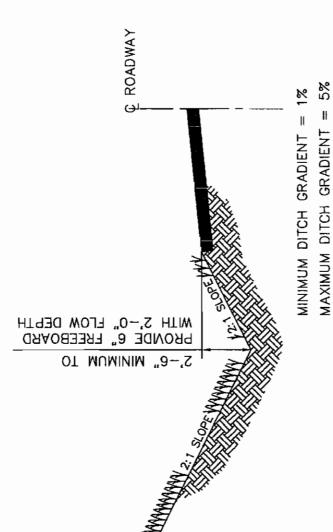




ANCILLARY HAUL ROAD TYPICAL CUT SECTION

DRAWN BY:	K.D.P.	1	10 1
DWG. NAME:	TYPHAULB	DAIE:	/6-0-7
APPROVED BY: S.R.I.	S.R.I.	SCALE; NONE	NONE

ATTACHMENT III.-B.-5.



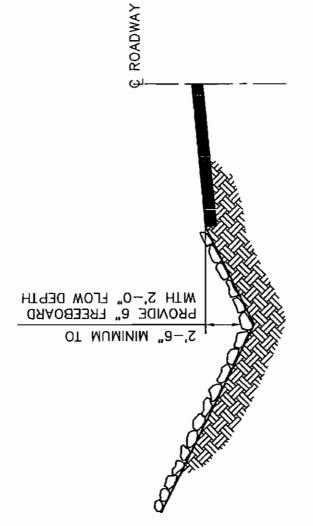
÷.

DITCH CHANNEL TO BE VEGETATED WITH
A MIXTURE OF BERMUDA GRASS, FESCUE,
AND LESPEDEZA TO CONFORM TO CLASS
"D" RETARDANT CLASS.



TYPICAL ANCILLARY ROADWAY DITCH CROSS SECTION

DATE: 2-4-97	SCALE: NONE
DRAWN BY: K.D.P. DWG. NAME: ANCIROAD	APPROVED BY: R.E.P.



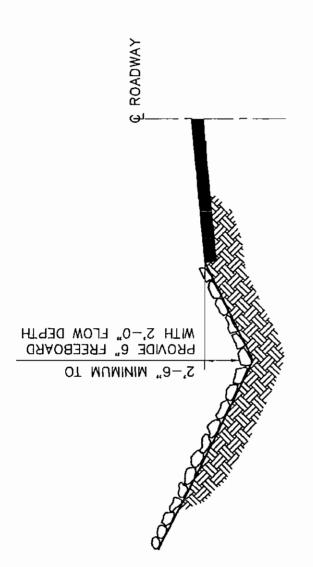
DITCH GRADIENT 5% TO 10%

DITCH CHANNEL TO BE LINED WITH NON-ERODIBLE NON-TOXIC, NON-ACID FORMING SANDSTONE OR LIMESTONE RIP-RAP. THE RIP-RAP WILL BE "CLASS 1" RIP-RAP AND HAVE A MINIMUM THICKNESS OF 12".



TYPICAL ANCILLARY ROADWAY DITCH CROSS SECTION

DATE: 2-4-97	SCALE: NONE
DRAWN BY: K.D.P. DWG. NAME: PRIMRD1	APPROVED BY: R.E.P.



DITCH GRADIENT 11% TO 17%

DITCH CHANNEL TO BE LINED WITH NON-ERODIBLE NON-TOXIC, NON-ACID FORMING SANDSTONE OR LIMESTONE RIP-RAP. THE RIP-RAP WILL BE "CLASS 2" RIP-RAP AND HAVE A MINIMUM THICKNESS OF 16".



TYPICAL ANCILLARY ROADWAY DITCH CROSS SECTION

DATE: \$ 2-4-97	SCALE: NONE
K.D.P. Primrd2	R.E.P.
DRAWN BY: DWG. NAME:	APPROVED BY: R.E.P.





Permit Boundary Surface Contour Sediment Basin





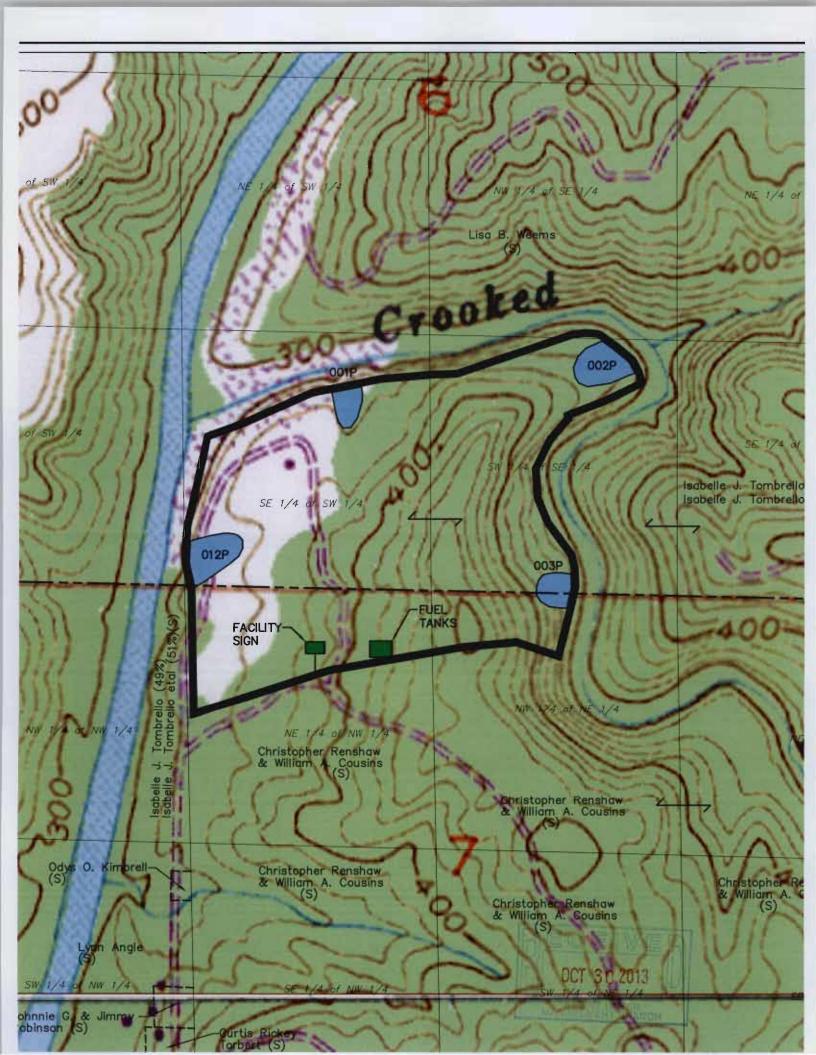
NPDES PERMIT AND VICINITY MAP Global Met Coal Corp. Black Creek Mine Permit No. Part of Sactions 6 & 7 Township 15 South, Range 3 West Jefferson County, Alabama

DRAWN BY: LG.S.
DWG. NAME: GMCCNPD40UTFALLS

DATE: 10-30-2013

APPROVED BY: LG.S. SCALE: 1" = 2000"

V: \Heath Franks\Mines\Global Met\NPDES Application\GMCCNPD FOUR OUTFALLS.dwg





Telephone: (20 Facsimile: (20

(205) 384-5553

(205) 295-3114 - Main Building

(205) 295-3115 - Water Lab

Web Address: www.percengineering.com

October 16, 2012

Ms. Catherine McNeill
Mining & Natural Resource Section
NPDES Permits Branch
Alabama Department of Environmental Management
1400 Coliseum Blvd.
Montgomery, AL 36110-2059

RE:

Global Met Coal Corp.

Clack Creek Mine NPDES Application

Dear Ms. McNeill:

Attached please find an application, application fee, SPCC Plan and permit maps for the above referenced facility.

If you require additional information, please feel free to call me at (205) 295-3112...

Thank You,

PERC Engineering Co., Inc.

Heath Franks

Environmental Scientist

(205) 295-3112

hfranks@percengineering.com For Global Met Coal Corp. OCT 17 2012

SPILL PREVENTION AND COUNTER MEASURES PLAN

FOR

GLOBAL MET COAL CORPORATION. BLACK CREEK MINE

Prepared By:

PERC Engineering Co., Inc. P.O. Box 1712 Jasper, AL 35502

Leslie G. Stephens, P.E./P.L.S. AL Reg. No. 14117-E

> 10/15/2012 Date



SPILL PREVENTION AND COUNTER MEASURES PLAN

This Spill Prevention and Counter Measures Plan will be maintained at Global Met Coal Corp. 's Black Creek Mine and will be presented to the Alabama Department of Environmental Management staff upon request.

Location:

T15S, R3W, Sections 6 & 7

Jefferson County, Alabama

Office Phone Number:

(604) 632-0085 Until Office is opened.

Office Fax Number:

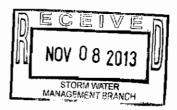
(604) 605-0009

Facility Contact & Address:

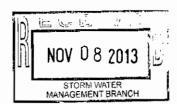
George W. Heard

Suite 204, 837 Hastings Street Vancouver, BC Canada V6C 3N6

- 1) (2) 10,000 gallon diesel fuel tank, (1) 550 gallon engine oil tank, (1) 550 Gallon Hydraulic Oil Tank, (1) 550 gallon waste oil tank, (1) 550 gallon transmission fluid tank at the Global Met Coal Corp.'s Black Creek Mine will be enclosed within earthen berms made of an impervious material or lined with impervious liner of sufficient capacity to contain a spill of 110% times the largest tank size. The containment area will utilize a drain system with a locked gate valve. (See Attached Detailed Design)
- 2) The containment area will be located within the permit area that is not subject to periodic flooding. The location is shown on the attached map.
- 3) The nearest surface water of the State is Crooked Creek and Locust Fork as shown on the NPDES Permit Map.



- 4) The site manager or foreman will be present during all dewaterings or drainings of the berm resulting from rainfall entering the berm area (if applicable). If significant amounts of oil products are present (a "sheen" on the water) then the water will be treated with an oil mop, hay or other appropriate oil fuel absorbent material before dewatering occurs and the recovered oil product and recovery materials will be stored in approved containers and transported to a nearby landfill which is rated for the recovered contaminant. If a major spill is encountered, all usable oil fuel will be immediately pumped into mobile fuel tanks for transport to another storage tank equipped with a containment structure. If the tank contents are contaminated with water or other substances that render that substance unusable, the oil product vendor will be contacted and the contaminated product will be shipped back to the refinery for the product to be recovered. Any unrecovered oil product remaining within the contaminant structure will also be treated with an oil mop, hay or other appropriate oil fuel absorbent material before dewatering occurs and disposed of as outlined above. After all the oil product has been recovered, any remaining water that exists (if any) will be drained from the contaminant structure and either allowed to naturally drain through an approved downstream outfall or transported (pumped) to another adjacent, approved outfall prior to entering the waters of the State. The Alabama Department of Environmental Management Department staff will also be contacted to document the spill. In addition, local Hazardous Materials Management professionals, as well as the local Fire Department has been contacted and notified of the need to potentially respond to a spill at the facility in the unlikely event that a spill occurs which is catastrophic in nature and exceeds the capability of the facility staff to control and recover it.
- 5) All drainage from the containment area will be routed, or the containment area shall be placed so that the drainage will drain into Outfall 012P. Any unusable fuel oil, contaminated soil and/or water will be disposed of in accordance with existing State and Federal regulations. In addition, a log will be maintained which indicates the date when the containment structure was dewatered, the person conducting the dewatering, and a brief description of the water (i.e., oily sheen, clear, slightly turbid, oily smell, etc.).
- 6) A written record shall be maintained by the facility's Custodian of Records of any spill which occurs, and the actions taken to properly dispose of all spilled material and the cleanup procedures.



- All unloading of transport vehicles to fill the tanks will meet minimum requirements and regulations established by the Department of Transportation. The tanks will be attended while filling to prevent overflow, and to note visible leaks from seams, gaskets, valves, etc. The Operations Manager of the facility will make periodic inspections of the unloading area to detect signs of minor spills. If spills are evident the contaminated soil will be disposed of in accordance with existing State and Federal regulations.
- All personnel who are in any way connected with unloading transport vehicles, use of fuel oil, maintenance of the facility, or responsible for storm water drainage and spill cleanup will be made familiar with this plan, and a copy of this plan, and a copy of this plan will be posted and readily available to all personnel at the facility.
- 9) Potential Sources of Spills
 - A) Tank or Tank Value Rupture:
 Prevention- Properly maintain tanks, tank valves and fittings and keep them in good condition. Visually inspect tanks periodically for leaks, and tank foundations for cracks and unusual settling.
 - B) Tank Overfill:
 Prevention- Truck drivers should follow correct operating procedures when unloading diesel fuel and stay with equipment at all times during unloading operations. Key personnel should know the truck is in the area unloading fuel. Any spillage will be immediately cleaned-up or mitigated in accordance with this plan.
 - iii. Hose Rupture During Unloading and Spillage From Hoses After Disconnection: Prevention- Periodic inspection of transport unloading hoses, the replacement of hoses as necessary, and use of the proper hose drainage procedure.

10) In The Event of An Oil Spill Call:

Alabama Department of Environmental Management Industrial/Mining Section **Field Operations Division** 1400 Coliseum Blvd. Montgomery, AL 36110-2059

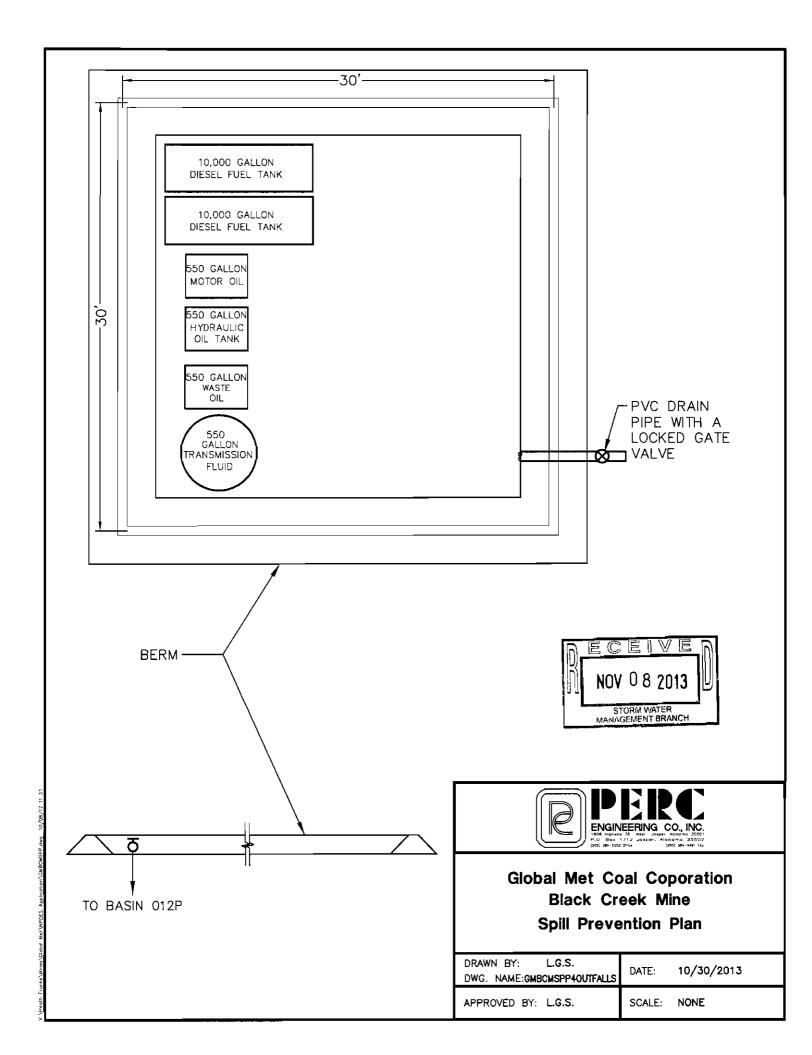
Telephone: (334) 271-7700

National Response Center - Telephone: 1-800-424-8802

Emergency Response After Hours-Telephone: 1-800-843-0699

Report the Following Information:

- 1) Name, address, and telephone number of person reporting spill.
- 2) Exact location of facility and spill.
- 3) Company name, number, and location.
- 4) Material spilled.
- Estimated quantity. 5)
- 6) Source of spill.
- 7) Cause of spill.
- 8) Nearest down-stream body of water to receive spill.
- 9) Discuss/advise regarding actions taken for containment and clean-up.



FRONT VIEW

SIDE VIEW 2' MIN. LINED WITH 1' CLAY MATERIAL



Global Met Coal Corporation
Black Creek Mine
Spill Prevention Plan
As Built Berm Section

DRAWN BY: DWG. NAME:	J.H.F. GMBCMSPP2	DATE:	10/8/12
APPROVED BY:	L.G.S.	SCALE:	NONE